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The Expected Impacts of Brexit on Portugal

Managers' Perception on the Textile and Apparel Sector

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Biographic Note

Mara Mateus was born in Guimarães, in 1995. In 2016, she took her BA in Economics at University of Economics in Porto, where she continued her studies, completing her Master in Management, in 2018. During its BA period, she lived in Cardiff for six months, doing an Erasmus programme. This was a unique and amazing experience, where she faced different cultures, handled diverse obstacles, learned and grew.

While was completing her Master Degree, in 2016, Mara decided to start working with his father in his textile company, called Confeções Degori, in Guimarães. She started by helping in the Production department in order to understand the product's "construction", and then, passed to the Commercial department, dealing with the clients and the prices. While was working with her father, as the textile industry become a part of her life, in March of 2017, she decided to create its own apparel brand, in the sports area, named GetUP. Which was a dream becomes a reality, being a successful brand with more than 10.000 followers on the Instagram and a shop in Vila Nova de Famalicão.

Mara has a proactive and self-motivated spirit with an intense desire for learning new things and searching for innovating areas. Since she was a child, she was passionate for the business world.

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Abstract

The withdrawal of UK from the European Union (EU) will have damaging impacts not only on the UK's economy, but also on the economies of its European trade partners. The Brexit long-term impacts are still unclear, however the short-term effects are still affecting the both European and British economies due to the uncertainty felt by the investors, disturbing its confidence and making them to reschedule their investment decisions. Brexit raises questions about the future stability of the EU, but the extent of its effects will depend on the terms of negotiations between the two parts concerning the future trading relationships and the UK financial obligations to the EU. The majority of the studies about Brexit focus on the UK side, disregarding the impacts that British decision will have on European countries. Thus, to fill this gap, this analysis will centre on the perception of Portuguese Textile & Apparel managers and agents about the expected impacts of Brexit. Based on a survey to a sample of 2.238 companies, to which answered 91 companies, results indicate that the majority of Portuguese Textile & Apparel managers present a negative perspective about the potential impacts on Portuguese trade relationship with the UK, being the companies with a high UK market share the most pessimistic ones.

Keywords: Brexit, UK and European Union, Trade Relationship

JEL F02, F15, C63

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1. Introduction

On March 29, 2017, United Kingdom (UK) has officially announced the leaving from the European Union (EU), after the referendum on June 23, 2016, where UK's population voted "YES" to Brexit, having two years to effectively leave the EU (following the Article 50 of the EU Treaty).

As a member of the European Union, the UK has access to the Single Market, which is defined by the European Commission as "*the EU as one territory without any internal borders or other regulatory obstacles to the free movement of goods and services*" (European Commission, 2017a). However, with the withdrawal, UK can lose the access to the Single Market, in a scenario of "Hard Brexit", where no trade deals are achieved and new tariffs to trade are imposed. Other softer scenarios, such as a Norway or Switzerland model, are possible outcomes, depending on the terms of negotiations reached by the two parts (Dhingra *et al.*, 2017a). In addition, according to Crafts (2016), the European Movement International (2016) and Kierzenkowski *et al.* (2016), belonging to the Single Market makes the UK more attractive in terms of foreign direct investment (FDI) inflows. Thus, UK could, in a near future, get less FDI inflows, mainly from the European countries.

This overall situation assumes a huge importance, since UK represents an important market share of the exports of several EU countries, and vice-versa. In 2016, the EU exports of goods to the UK reached an amount of €293 billion, while the EU imports from the UK represented a smaller amount of €176 billion (Pordata, 2016a). Thus, we accomplish that UK has a large deficit on the trade in goods with EU. This deficit is reflected on all EU members, with the exception of Ireland (Lawless and Morgenroth, 2016). Concerning the trade in services, in 2016, we realize that EU exports €88 billion in services to UK, while importing from UK an amount of €117 billion (Pordata, 2016a). In the case of Portugal, the volumes of trade are lower when comparing to Germany or France, however they assume in the same way high significance. In 2016, in terms of goods, Portuguese exports to the UK were €3,531 million (weighting 7% on the total exports), while imports reached €1,877 million, representing 3% of the Portuguese imports (Comtrade, 2016a). Thus, the United Kingdom assumes the 4th position on Portuguese exports, while goes down to the 6th position when we consider the countries which Portugal imports from. Regarding the services, according to Comtrade (2016b), in 2016, Portugal exports €3,945 million (15% of total service exports), and imports from the UK €1,411 million (almost 11% of total imports of services). Hence, Portugal presents a positive commercial balance with the UK on both goods and services.

Accordingly, those countries for which UK represents a high market share on trade, for instance Germany, Portugal, France, Spain, among others, will have strong incentives to apply for a Soft Brexit, in order to avoid the imposition of tariffs and regulations on trade, which would imply costs and delays. On the other side, the Central, Eastern and Southeast European members, which weight of UK exports does not highly affect their economy, may not agree with similar rights for a country that does not want to remain as a member of the EU and continue to benefit from the advantages of belonging to the Single Market (Begg, 2017). Moreover, according to Lawless & Morgenrath (2016), the impacts of Brexit will not be similar on all EU members, it will depend on the amount of UK trade share as well as on the type of products traded and the elasticity of price changes, because in the worst scenario, the products would face different tariffs, which can vary from 0% to more than 80%. Countries that exports products with high tariffs and high elasticity would fell extremely the Brexit effects (Lawless & Morgenrath, 2016).

Additionally, UK showed its intention to trade with non-EU countries, and outside of the Single Market, UK may search for different suppliers, such as China and US. China has been increasing its share on the UK's imports, and Brexit can foment even more this relationship. Some studies predict that "*by 2035, China is the UK's second largest export market (ahead Germany) and India has become number seven (ahead Spain and Italy)*" (Slater, 2016, p.16). Hence, European companies, which are dependent of the British market can lose potential clients to third countries. Moreover, these companies have already been affected on the short term, as on the day after the Brexit announcement the pound lost around 15% of its value towards Euro (around 15%) (Begg, 2017).

As Brexit is a recent topic, studies about its impact are relatively scarce. Besides, the few existing studies and investigations focus mainly on the UK side, neglecting the importance that the effects of Brexit may have on the European Union. The few exceptions are recent investigations about Germany and France (Bouoiyour & Selmi, 2016), Romania (Stanciu, 2017), Ireland ((Bergin *et al.*, 2016) and (Vega, Espino and Valero (2018)), and Germany (Nothnagel and Heidenreich, 2017). In this way, the key goal of this research is to gauge which are the expected impacts of Brexit on Portugal. The study aims to explore the Portuguese managers and agents' perception about the potential impacts of Brexit on Portugal, focusing on the Textile and Apparel sector, due to its crucial prominence to Portugal in terms of employability and GDP's contribution. According to Pordata (2016b), these sectors represent almost 11% of Portuguese exports in terms of goods, employing 210 thousand persons (Pordata, 2016c), which represents almost 5% of the total population employed at full-time in Portugal. Furthermore, the Textile sector is the third most important sector in terms of Portuguese exports to the British market. Lawless and Morgenroth (2016), and Black (2017) did an analysis to the sectors which can be more affected by the Brexit and found that, in a Hard Brexit scenario, the textiles will be hardly affected by high tariffs. In this way, this research will offer important information to the Portuguese companies, helping them preparing to face the adverse consequences of UK's decision and to develop appropriate strategic responses.

Hence, a similar approach to the one driven by Nothnagel and Heidenreich (2017) about Germany, which focused on an online survey conducted to Germany companies will be followed: we will implement a survey to be completed by Portuguese Textile managers in order to study their expectation about the future impacts of Brexit on Portuguese economy. This survey will be complemented by two interviews to a Portuguese and British Textile Agent, which will follow the same topics of the survey.

The present work is divided in 5 chapters, besides the introduction part. It starts by presenting a literature review (Chapter 2). Further, it is studied the trade evolution between Portugal and the UK and the principal sectors traded (Chapter 3), followed by a description of the methodology process (Chapter 4), and the results description and discussion (Chapter 5). Finally, it is presented the conclusions, limitations and further implications of this research (Chapter 6).

2. Literature Review

This chapter is divided into 4 sections. The diverse levels of economic integration are, firstly, defined and the UK position on the EU is contextualized (Section 2.1). On Section 2.2, it is explored the benefits that the UK obtains from belonging to the EU membership, contrasting with the costs incurred, in order to find if being a member or a withdrawal is the most favourable decision. On Section 2.3, it is addressed the possible scenarios for the future UK-EU relationship after Brexit, defining the features of each alternative and the losses that each involves. Finally, section 2.4 analyses similar studies done to other European countries.

2.1. Integration concepts

Become a member of the European Union is a long and complex process that involves a gradual integration of the country by following the specific conditions imposed in order to assure a smooth and successful economic convergence. Thus, there are different levels of integration, namely the Free Trade Area (FTA), the Customs Union, the European Single Market and the Monetary Union.

According to European Commission (2017b), the Free Trade Area involves an agreement between the countries, where the customs barriers and commercial regulations are eliminated. However, each country maintains their own customs regulation and trade relationship with third countries.

The Customs Union is defined by the European Commission (2017c) as "*countries apply a uniform system for handling the import, export and transit of goods and implement a common set of rules called the Union Customs Code (UCC). A uniform system of customs duties is being used on imports from outside the EU and there are no customs duties at the borders between the EU countries*". In sum, belonging to the EU Customs Union allows the EU members to trade with each other without any trade barriers or custom control, however they are not freely allowed to trade with non-EU countries (Goodwin, 2017).

The European Single Market allows the free movement of people, goods and services between all the members, stimulating the trade, competition, and economic growth and improving the efficiency of trade. Moreover, according to the European Commission, "*Thanks to the abolition of border controls between EU countries, people can travel freely throughout most of the continent. And it has become much easier to live, work and travel abroad in Europe. Every member* *country must treat EU citizens in exactly the same way as its own citizens for employment, social security and tax purposes*" (European Commission, 2017a).

Finally, the Monetary Union promotes the integration and cohesion between all members, with more than 340 million EU citizens in 19 countries using the Euro as their currency (European Commission, 2017d). According to Rehn (2014) a single currency brings many advantages, as it promotes price stability, and consequently, a stable inflation rate, eliminates the transaction costs and the exchange rate risk, and stimulates the economic growth. The monetary union is more practical and advantageous for the citizens who travel around the Euro area, making the prices more transparent and a more stable price protects their purchasing power (Rehn, 2014).

Furthermore, the 28 EU members belong to the European Single Market, although they are not obligated to belong to the Monetary Union, as happens with the UK.

2.2. The EU membership with the UK

In 1973, the UK becomes a member of the EU, doubling its GDP per capita (Kierzenkowski *et al.*, 2016). In line with Crafts (2016, p.12), "*when the UK entered the EU in 1973 it was after a period of serious underperformance in economic growth which had seen income and productivity levels fall behind France and Germany*". The UK has recovered its economy recession when joined the EU, which allowed the liberalization and increase of trade and a more competitive UK's performance in terms of productivity. After the mid-1990's, UK growth was higher than France and Germany. Crafts (2016) also suggests that if UK had continued outside the EU, it probably would remain with an economic growth behind France and Germany.

This membership presents benefits as well as costs, so it is crucial to make a cost-benefit analysis (summarized on the Table 1) to understand if the exit from this membership will generate positive or negative impacts to the UK economy.

Table 1 - Cost-benefit analysis of the EU-UK membership

BENEFITS	**COSTS**
Free access to Single Market	No control over immigration, but immigration has a strong impact on the labour force.
FDI attractiveness	Common Agricultural Policy unfavourable to the UK: higher prices paid by agricultural goods.

	EU budget contribution: max. £280 million per week.
	Brexit supporters claim for demanding EU regulations.
TOTAL: **8,6% - 10,6% of UK GDP**	**1,4% of UK GDP**

Source: Own elaboration based on Crafts (2016, p.9)

Starting with the benefits, the main advantage of being a member of the EU is the free access to the Single Market, allowing the trade between all members without any trade barrier or cost, fomenting the increase and improvement of commercial transactions. Moreover, following Kierzenkowski *et al.* (2016), Crafts (2016) and the European Movement International (2016), the EU membership stimulates the Foreign Direct Investment (FDI) attractiveness. According to these authors, FDI inflows have strong and crucial impacts on the economy, since foreign investments encourages the advance of new ideas/knowledge and innovation, and consequently, the improvement on productivity and export capacity. Thus, FDI allows a country to rise its production capacity, becoming more competitive and being able to practice more competitive prices. The FDI inflows also affect positively the managerial quality as well as the organizational efficiency. The larger are the FDI inflows, the greater is the trade integration between UK and EU, and stronger is the relationship between them (Kierzenkowski *et al.*, 2016). However, with the exit of UK from EU, the UK become less attractive to European Union continue investing high amounts, i.e, the UK will receive lower FDI inflows from EU members.

On the other hand, European Union Member States support the "Membership Fee", which not only include monetary costs, but also some constraints and regulations that all members have to follow. Firstly, UK has no control over the immigration from the European countries. According to Crafts (2016, p.8), "*the stock of European Economic Area (EEA) immigrants in the UK rose from 0.9 to 2.8 million between 1995 and 2011 of whom 0.4 million were employed in 1995 and 1.5 million in 2011*". Having no control over this key issue has promoted the Brexit decision, since one of the UK's goal with the exit from the EU is to restrict and impose tighter controls to immigrants (Kierzenkowski *et al.*, 2016). However, immigration has a strong impact on the domestic labour force, as between 2001 and 2011, the EEA immigrants gave a net fiscal contribution of almost £29 billion (Craft, 2016). So, apparently, immigration does not seem to represent a real cost to the UK. Secondly, the Common Agricultural Policy (CAP) has been unfavourable to the UK, since it presents a small agricultural sector, and EU producers impose higher prices to British consumers (Crafts, 2016). Another component of this fee is the UK's contribution to the EU budget, which UK will partial or totally save with Brexit. The real contribution from UK to EU is between 0.3% and 0.7% of GDP, representing a maximum of £280 million per week (Begg, 2017). According also to this author, regarding the previsions in the UK's slowdown economy due to Brexit, the fiscal deficit will get worse in £12 billion per year, being superior to the net savings from Brussels payment. Finally, Brexit supporters claim for extreme EU regulation and, consequently, the costs that it involves on the economy. According to Crafts (2016), despite of having regulations that affect investment and innovation decisions, which can harm country's performance, the UK has been able to maintain low levels of regulation, occupying the last positions on the OECD indicators.

To sum up, the costs reflected by the previous four arguments about membership-fee represent no more than 1.4% of UK's GDP. Comparing this value with the benefits from the free-trade and the high income levels, we find a positive annual effect on GDP of 8.6% to 10.6%, being clearly that the access to EU membership is extremely beneficial (Crafts, 2016). Thus, regarding this analysis, Brexit could not seem to be a good decision from the UK side, and consequently, a recession on the UK's economy would be reflected on the European trade partners as well, mainly on the ones that have high volumes of trade with the UK, as well as on the ones which integrate the same value chain as the United Kingdom. The international supply chains, which involves the path that the product follows through several intermediate production steps on different countries taking advantage of economies of scale and high levels of specialization, could no longer be viable after Brexit (Black, 2017). Moreover, as stated by Kierzenkowki *et al.* (2016), the uncertainty felt by the investors due to Brexit decision can be spillover to the European investments. The UK is stronger being an EU member, and at the same time the EU gains strength with the UK as member. With the UK's withdrawal, some indicators suggest that EU share of world GDP and trade would be smaller than US and China, losing the world leadership (Kierzenkowski *et al.*, 2016).

2.3. The options for the EU-UK relationship after Brexit

As was referred previously, the Brexit negotiations assume a high complexity. An agreement between the UK and the other 27 EU members has to be reached, and the "Brexiters" requirements are not easy to be followed by the EU members, as they are on a "privileged" position comparing to the UK (Belke & Gros, 2017). The majority of the studies predict that no matter which option the negotiations reach, the UK's welfare will be always negative, however the magnitude of this loss will be higher under a Hard Brexit (Dhringa *et al.,* 2017a). Thus, depending on how negotiations will be developed, a range of possibilities are open to the future of the UK, and the European Union, as despite of focusing on the UK's economy, there will be direct and indirect consequences to the EU members. The European countries (mainly the ones with an intensive trade with the UK, such as Ireland) will be negatively affected, while the non-EU countries will gain from the trade diversification. However, in general the world economy will be harmfully affected (Dhringa *et al.,* 2017a). Each possibility promotes a different impact on both parts, varying from remaining on the European Economic Area (EEA), the most optimistic scenario, named as "Soft Brexit", to the total exit from the EU without a "friendly" agreement, where trade will follow the World Trade Organization (WTO) rules, the most pessimistic scenario, called "Hard Brexit" (Kierzenkowski *et al.*, 2016).

Starting with the membership of the EEA, which includes the Norway, Iceland and Lieschtenstein, it was mentioned by several authors (e.g. Belke & Gros, 2017; Bergin *et al.*, 2016; Dhingra *et al.*, 2017a; Kazzazi *et al.*, 2017; Kierzenkowski *et al.,* 2016; Sampson, 2017), as the most optimistic scenario. The EEA allows the UK to remain on the European Single Market, with the free movement of goods, services, capital and people. But, at the same time, the EEA members are outside the EU's Customs Union, so the UK can trade with non-EU countries and conduct their own trade rules. This is a particular agreement since belonging to the Single Market implies belonging to the Customs Union, as the Single Market is a deeper integration level. So, following the integration concepts (in Section 2.1) the EEA members should belong to the Customs Union, but it not happens. Thus, goods continue to be traded freely, and there are no new barriers in services. So UK continues with the passporting rights, which "*give financial firms based in one member state the right to provide services throughout the Single Market*" (Sampson, 2017, pp. 165). However, the UK has to continue contributing to the EU budget, and has to follow the EU's legislation, even with a very restricted position on the regulation design (Sampson, 2017). This scenario is advantageous for UK in terms of trade, as no trade barriers and non-tariff barriers are imposed, and the trade partnerships with the EU countries are not highly affected. Consequently, the impacts on the EU are equally minimized with this soft outcome, and the main concerns of managers about future of trade relationships are disregarded. However, with Brexit, the UK want to start controlling the immigration and with this solution it is not possible.

Several authors (e.g. Dhingra *et al.*, 2017b; Kazzazi *et al.,* 2017; Kierzenkowski *et al.*, 2016; Lawless & Morgenroth, 2016; Sampson, 2017) mention that a second alternative is a bilateral agreement about trade and economic relationship. However, the Free Trade Agreements with the EU do not guarantee the free trade on services, and do not guarantee the economic harmonization as the Single Market does (Kierzenkowski *et al.*, 2016). Switzerland is an example of a Free Trade Agreement, being the most well integrated country outside the EEA (Sampson, 2017). The integration was accomplished gradually by reaching different bilateral treaties, which allow the Switzerland to participate partially on EU regulation. This partnership gives the flexibility to Switzerland participate on the programmes that it considers as most favourable for the country, but not allows it to be part of legislation design and it has to contribute to the EU budget (Sampson, 2017). At the same time, not being obligated to follow the EU legislations promotes a divergence in rules that increases the non-tariff barriers due to the introduction of border procedures (European Commission, 2017d). Additionally, despite of not belonging to the Single Market, the Switzerland has free movement on goods and people as the other EEA members, but a deal about free trade in services was not finalized by the two parties, which not allows the Swiss banks to have passport rights. Thus, Switzerland case is an example of a Free Trade Area, excluding on the services. Switzerland also does not belong to the Customs Union. In general, the UK would continue trade with the EU freely, and would be able to trade with third countries, but the immigration control would be impossible.

According to Dhringa *et al.* (2017b), Prins (2017), Sampson (2017), and Slater (2016), instead of a FTA, UK can also negotiate remaining on EU's Customs Union with the EU, like Turkey, in order to guarantee free trade barriers on goods. This deal allows the UK to restrict immigration, as UK is outside the Single Market, and to not follow EU regulation, but the trade with non-EU countries is not possible and the non-tariff barriers increase due to regulatory divergence (Sampson, 2017).

The last alternative mentioned on the literature (e.g. Black, 2017; Dhringa *et al.,* 2017b; Kierzenkowski *et al.*, 2016; Lawless and Morgenroth, 2016; Sampson, 2017) is the hardest option, which creates the higher welfare loss to the UK and also to the EU members: trade with the EU under World Trade Organization (WTO). According to Dhringa *et al.* (2017b, pp.7), "*each member must grant the same Most Favoured Nation (MFN) market access, including charge the same tariffs to all other WTO members*". Thus, bureaucracy and trade costs highly increase, since UK's exports face importing MFN tariffs, as well as the non-tariffs barriers, as the UK has its own regulations. According to Lawless and Morgenroth (2016), outside the Single Market, the UK faces the WTO tariffs, which can vary from 0% until 80% depending on the type of product. Consequently, under this scenario, the Brexit impacts differ among EU members, the ones with a high intensive trade with the UK and which products traded face high WTO tariffs and high elasticity of price changes are the most affected. For the EU countries, the trade in goods with the UK is expected to fall by 5% to 40% (Lawless and Morgenroth, 2016). Additionally, regarding the services, due to the loss of passporting rights, the exports of services from UK to the EU are expected to fall by half, and the trade costs are expected to increase around 20% (Kierzenkowski *et al.,* 2016).

Prins (2017) studied the Brexit impacts on Netherlands and highlighted four possibilities for the future trading relationship according to the negotiations position so far: EEA, Customs Union, Bilateral Agreement and WTO. However, on this research it is only mentioned three scenarios, because it is considered the Customs Union scenario as an example of a Bilateral Agreement, as well as the Switzerland case, which was considered by Prins (2017) as the "Bilateral Agreement". So, in general, all the four possibilities are studied, the only difference is that Prins (2017) considered four different scenarios, not recognising the Customs Union as a particular case of a Bilateral Agreement. Table 2 summarizes the main features of each scenario.

Table 2 – Summary of the different scenarios for Brexit

<table>
<tr><th colspan="2">Scenarios</th><th>Tariffs on goods exported to/imported from UK</th><th>Border & Customs Controls</th><th>Free movement of service</th><th>Free movement of EU citizens</th><th>EU FTA´s with third countries</th></tr>
<tr><td colspan="2">European Economic Area (EEA)</td><td>No (except agricultural products)</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td rowspan="2">Bilateral Agreement</td><td>Customs Union with the EU</td><td>No (exceptions are possible)</td><td>Yes</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>Switzerland Case</td><td>Probably on a selection of goods</td><td>Yes</td><td>Depend on the agreement</td><td>Probably not</td><td>No</td></tr>
<tr><td colspan="2">Hard Brexit</td><td>Yes (probably WTO)</td><td>Yes</td><td>No</td><td>No</td><td>No</td></tr>
</table>

Source: Adapted from Prins (2017)

Besides referring the features of each scenario, Prins (2017) evaluates the likelihood of each. Thus, Prins (2017) believes that the EEA and Customs Union outcomes are not likely, as in these outcomes the British population's requirements concerning the immigration control, free trade with third countries, and the reduction or non-contribution to the EU budget will not be totally followed. For him, the most likely scenario is the "Bilateral Agreement" as a Switzerland case, which content of negotiations is extremely uncertain, and the extent of the trade barriers will also vary according to the type of product and other measures. The "Hard Brexit" scenario is also a very likely scenario, according to Prins (2017), where the trade regulations follow the World Trade Organisation (WTO) rules. This means the introduction of import tariffs, border controls and customs regulations, increasing the trade costs.

To conclude, according to Sampson (2017) and Dhringa *et al.* (2017b), on January, 2017, Theresa May announced that the UK intends to leave the Single Market (due to immigration control) as well as the Customs Union (due to new trade relationship with non-EU countries), and aims to reach a new EFTA with EU members the most free possible in terms of goods and services. On the other side, the EU will not break the four pillars of Single Market, otherwise following the "Brexiters" wishes will stimulate other countries to have the same behaviour and leave the EU. These positions make the Hard Brexit seems more likely. According to Belke and Gros (2017), the losses for the EU members are expected to be 10 or 15 times lower than for the British economy: under an optimistic scenario, the losses for EU are predicted to be around 0.08% of GDP until 2030, while for the UK it is expected to have losses around 1.31%; under the Hard Brexit scenario, the losses get worst for both, the EU losses are approximately 0.44% of its GDP, while for the UK are estimated 4.21% of losses. Table 3 presents a summary of the expected losses on both parts for each scenario:

Table 3 – Expected losses from the eptions for the EU-UK relationship after Brexit

Type of Relationship		**Expected Losses**	**Author**
EEA		UK losses: 1.31% of UK´s GDP. EU losses: 0.08% of EU´s GDP.	Belke & Gros (2017)
Bilateral Agreement	**Switzerland Case**	Fall in the EU exports to UK of 1.7%. While, a fall of 12.5% on the UK´s exports to the EU.	Lawless & Morgenroth, 2016).
	Customs Union (Turkey Case)		
WTO		Fall in the EU exports to UK of 3%. While, a fall of 22% on the UK´s exports to the EU.	Kierzenkowski *et al.* (2016)
		UK losses: 4.21% of UK´s GDP. EU losses: 0.44% of EU´s GDP. Trade costs in services are expected to increase around 20%.	Lawless and Morgenroth (2016)

Source: Own elaboration

2.4. Studies about the Brexit impacts on another European countries

Despite of being a recent topic, the impacts of Brexit on different members of the European Union had already been studied. Different researches were done in Germany and France (Bouoiyour & Selmi, 2016), Romania (Stanciu, 2017), Ireland ((Bergin *et al.*, 2016) and (Vega, Espino & Valero (2018)), and Germany (Nothnagel and Heidenreich, 2017). The first authors, Bouoiyour and Selmi (2016), analyse the Internet search about Brexit as a quantitative measure to test if it influences the stock market of Germany, France and UK. The authors believe that this method is a potential tie helping to study the investors' behaviour under periods of uncertainty, like Brexit. Stanciu (2017) did an analysis about the available information published by media and scientific papers to gauge the potential impacts of Brexit on Romania. On Ireland, Bergin *et al.* (2016) provide a macroeconomic analysis of the Brexit impacts on Ireland under the three different scenarios, mentioned on the previous section, creating a baseline in a scenario without Brexit and comparing it with the results obtained under the Brexit scenarios. Finally, Nothnagel and Heidenreich (2017) used an online survey to find the Germany companies' perspective about the Brexit impacts. The studies presented were found on "Scopus" on December of 2017, by inserting as key-words: "Brexit", "Impacts" and "Europe". Studies about the impacts of Brexit on the European countries are not abundant, and some of them are not accessible. Thus, the selection of the described studies was based on these limitations, being analysed the few studies available on the platform.

The main features of each study are summarized on table 4, where the studies are organized by the chronologic order.

Table 4 - Similar studies

Country	Methodology	Findings		Authors
Germany, France	Quantitative: Analysis of the impact of Internet Search about "Brexit" on stock market returns, though the QR tool (set of regression curves)	General result: uncertainty has a negative influence on EU stock markets. Germany: Equity return ranges between -0.25 and -0.46. France: Equity return ranges between -0.11 and -0.17.		*Bouoiyour & Selmi (2016)*
Romania	Qualitative: Study of the available information published by the media and scientific papers.	Less funds from the EU and from the Romanian workers in the UK. Possibility of disaggregation of the EU. Romania become more strategic on the European context.		*Stanciu, 2017*
Ireland	Quantitative: Macroeconomic Analysis of the Long-	**EEA**	Trade between EU-UK would be reduced by 23%.	*Bergin et al. (2016)*

	Term effects, using the COSMO model to compare the three scenarios results with a baseline where no Brexit occur.		Level of Irish output would be 2.3% below than if Brexit not happen.	
		EFTA	Trade between EU-UK would be reduced by 31%. Level of Irish output would be 2.7% below than if Brexit not happen.	
		WTO	Trade between EU-UK would be reduced by 50%. Level of Irish output would be 3.8% below than if Brexit not happen.	
Germany	Quantitative: Online Survey – Companies' Perspective about the Impacts of Brexit		Uncertainty: Companies are expecting that businesses get worst. On the companies' perspective, the priority of negotiations is the free movement of goods (no barriers). 1 in 10 companies are planning to shift its investment from the UK to other market.	*Nothnagel and Heidenreich (2017)*

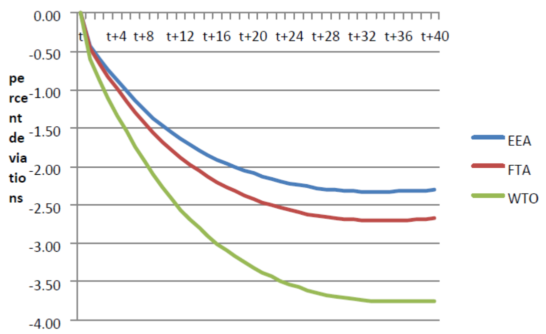
Source: Own elaboration

On the study done about Germany and France, Bouoiyour & Selmi (2016) used a quantile regression (QR tool), which consists on a set of regression curves that change across the different quantiles of the dependent variable, allowing the comparison between the "Brexit" attention and the UK and EU equities variation. Thus, this analysis will focus on the Internet search about Brexit in order to find its influence on the anxiety of market participants and how it might affect the investors' decisions. The analysis driven by these authors can lead to subjective results and not reflect the full impacts in social, economic and political terms. However, the results seem very interesting. Although the general result is that uncertainty has a negative influence on the stock markets of the EU countries, the magnitude of the effect is not uniform across them. Hence, the attention to Brexit affects more the Germany stock market return than in France, and the UK is the less affected among the three countries. This is explained by the fact that the British market has a higher prominence to Germany, enjoying of a higher trade and investment relation than France. Besides the negative effect on EU market stock, the authors also believe that Brexit will create geopolitical impacts and will harm the prospects of European integration.

Contrarily to the previous study, Stanciu (2017) does an investigation of the online information published by media and scientific papers in order to measure which can be the potential effects of Brexit on Romania. This study reveals that Brexit had created uncertainty and can stimulate the disaggregation of the other members of the EU, as they can follow the same decision of the UK. Stanciu (2017) also found some authors arguing that the exit of the UK from the EU can affect the labour market of Romania, mainly the Romanian workers that are working on the UK, as well as a decrease on the subsidies from the EU, as now the budget will be lower without UK contribution. The Romania Government also analysed the Brexit effects, accomplishing some negative and positive results. The negative points highlighted are related with the less funds received from the European Union as well as from the Romanian workers in the UK, and also the risk of dissociation of the European Union. The positive topics pointed out: Romania would be the sixth larger country in the EU, so there are more opportunities and the country becomes more strategic. Moreover, they found that the short-term impact on Romania will be narrow, suffering a short currency fluctuation.

Bergin *et al.* (2016) analyses the Brexit impacts on Ireland, doing a macroeconomic analysis and quantifying the long-term effects on the Irish economy under the three different scenarios: EEA, EFTA and WTO by using the Core Structure Model (COSMO). This study seems very pertinent as Ireland is predicted to be the country most affected by the British decision due to its closest relationship and dependence of the UK. This study disregards the short-term impacts concerning the uncertainty and exchange rate fluctuation, because uncertainty is very complex to introduce on the models due to its high volatility. Furthermore, the authors focus on the long-term effects: reduction of trade volumes, FDI, productivity and migration, which are more readily measured on the models. These authors predict that the trade between the EU and UK would be reduced by 23% under EEA scenario, 31% under EFTA scenario, and 50% under WTO scenario. Concerning the estimation of the Brexit impacts on Ireland, firstly, with the COSMO, it is done a projection of the Irish economy until 2030 in a scenario that Brexit not occur, to serve as a baseline to compare the results obtained under the three alternative Brexit scenarios. The impact of Brexit on the Irish output under each scenario is presented on Figure 1.

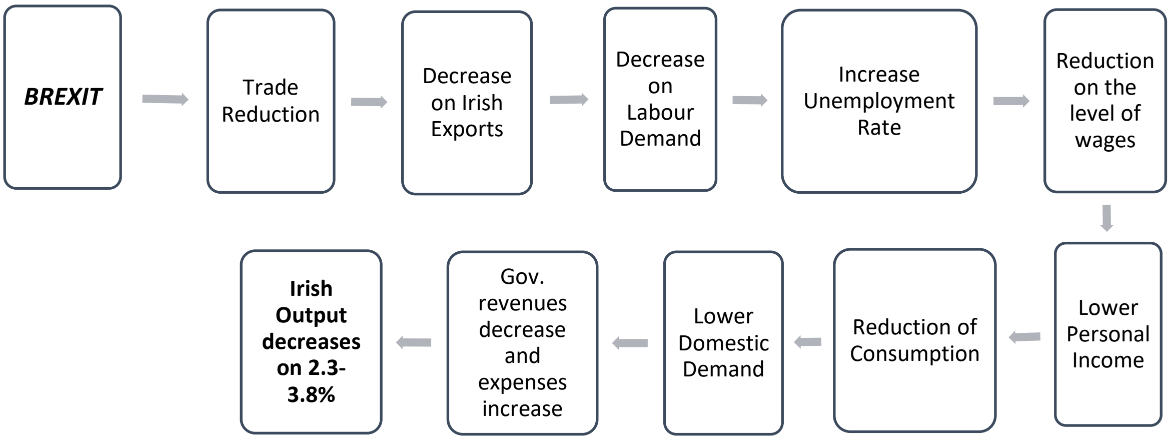
Fig. 1 Impact on the level of real output in Ireland across the three scenarios – Deviations from the baseline



Source: Bergin et al., 2016, pp.9

On all scenarios the level of Irish output is consistently below comparing to the baseline, where the Brexit would not occur, being mostly affected under a WTO scenario comparing with the Soft scenario (EEA), as the other authors predicted (on the Section 2.2). This simulation suggests that the Irish economy will be strongly affected by the long-term impacts, being this shock initially promoted by the trade reduction, which will trigger consequences that affects other variables of Irish economy. Specifically, the first and big impact on the trade reductions will promote the decrease on Irish exports. Further, less exports leads to a decrease on labour demand, which affects the employment and increases the unemployment rate. By increasing the unemployment rate, the level of wages is reduced and the Irish population has lower personal income, which decreases the consumption, and, consequently, the domestic demand. With less domestic demand and national production, Government revenues decrease due to less taxes, and on the other hand, the Government expenditures increase due to higher unemployment. Thus, the British decision will create a "Domino Effect" on the Irish Economy, presented on the Figure 2, decreasing its level of output between 2.3% to 3.8%.

Fig. 2 Domino effect – The Brexit impacts on the Irish output

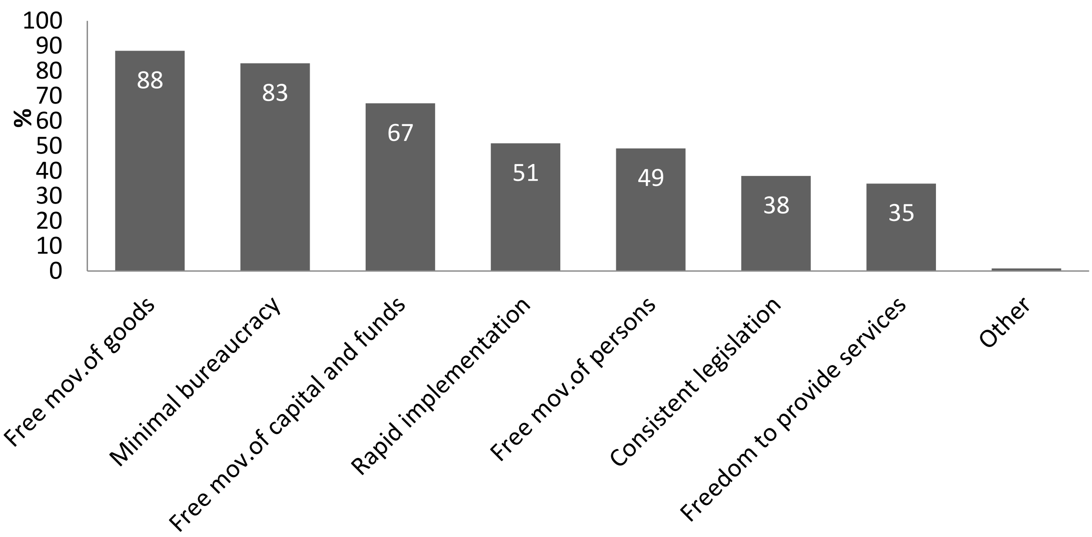


Source: Own elaboration based on Bergin et al. (2016)

Vega, Espino and Valero (2018) also developed an analysis about the impacts of Brexit in Ireland, focusing on the impacts that it may have on the exports of Ireland to Europe, as a high percentage of exports is done through the maritime freight which passes from British territory. Thus, they reached the same conclusion of Bergin *et al.* (2016) foreseeing that Ireland will experience large losses with Brexit, mainly due to this geographic location.

Finally, the study carried out by Nothnagel and Heidenreich (2017) about Germany is based on an online survey. The survey was delivered to 2.200 Germany companies with international operations. The study was based on 1.300 responses from companies that trade with the UK, representing 59% of the total companies surveyed. According to the results of the survey, the high uncertainty caused by Brexit have worsening the businesses, and the most pessimistic Germany companies, which are the ones that imports goods and services from UK, are expecting to get even worst on the near future, since changes on the supply chain may occur, as well as higher trade costs. In addition to find which is the companies' perspective about the future, the survey also wants to gauge which are the priorities for the Brexit negotiations that companies consider to be the most important. The results show that the first priority is related with the free movement of goods (88% of the companies) concerning the uncertainty about the imposition of tariffs, and consequent higher trade costs. The following priority is the "minimal bureaucracy" as "*after the UK withdraws from the EU, after all, companies would likely have to file formal customs declarations for imports and exports, as well as having to obtain export licenses for certain goods*" (Nothnagel and Heidenreich, 2017, p.4). Figure 3 summarizes the list of priorities according to companies' perception.

Fig. 3 The classification of the aspects of Brexit negotiations



Source: Own elaboration based on Nothnagel & Heidenreich (2017)

Finally, the last topic that the survey done by Nothnagel and Heidenreich (2017) intends to measure is the probability of the German companies to shift its investment to other countries, concluding that almost one in ten companies with investments in the UK is planning to relocate to different markets. In the long-term, there is a high probability of a decrease in German investments in the United Kingdom. About one half of the German companies are planning to shift the investments to their own country, so Brexit can also bring some positive effects to Germany, and 39% of the companies intend to redirect their investment to outside the Europe.

The studies mentioned so far highly differ from each other on the methodology as well as on the focus of the investigation, diverging from the companies' perspective to the prediction of the impact on the country's output. However, on all the studies the UK is a crucial trading partner, having a high weight on the volume of the exports and the imports of the countries. Moreover, the negative side of Brexit is highlighted on all, being presented the consequences of the uncertainty, as well as the trade costs that the UK decision could generate.

3. UK as Trading Partner of Portugal

This chapter focuses on the analysis of the UK-Portugal trade partnership, being divided into two sections: the first section, which analyses the trade in goods and the second section, which studies the trade in services. Both sections analyses the evolution of trade volumes as well as the type of products most traded between the two countries.

3.1. Trade in goods

In terms of goods, the trade between Portugal and the United Kingdom has experienced an exponential growth until 2000, which had started when Portugal joined to the European Union, in 1986 (Figure 4). This growth was stable between 2000 and 2004, and starts to decrease until the crisis of 2009. In 2010, it is visible a great recover of the previous growth until 2016. In the last years, the amount of exports of goods substantially exceeds that of imports, so Portugal had experienced a positive commercial balance. This positive performance is reflected in almost all years, which means that Portugal exports more to the United Kingdom than it imports from the UK, and this difference has been more significant.

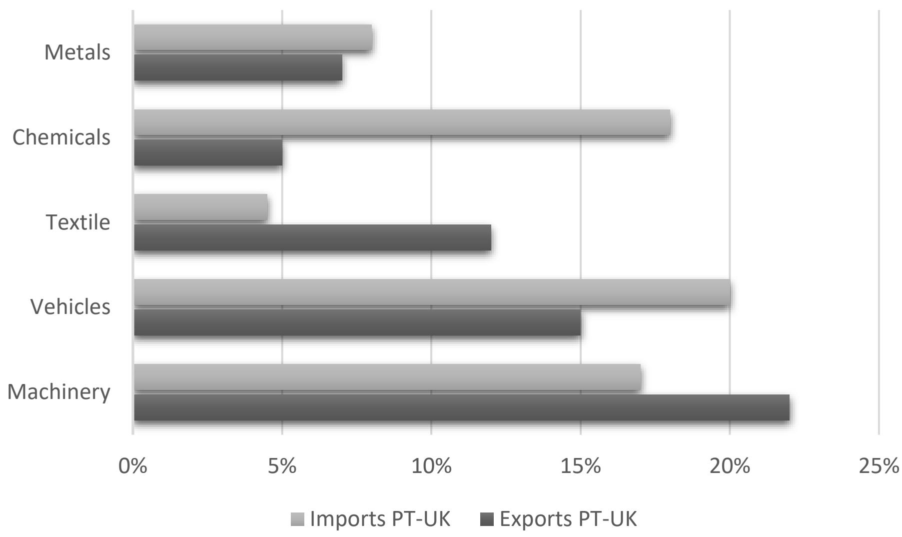
Fig.4 Bilateral trade evolution with the UK (in terms of Goods) (Millions €)

Source: Comtrade, 2016c

Thus, according to Comtrade (2016c), the UK represents an important trading partner to Portugal, being the 4th largest market for Portuguese exports. In 2016, Portugal exported 3,531 million euros, representing 7% of total exports of goods, and imported 1,877 million euros, representing 3% of total imports of goods.

Concerning the type of product, according to the OEC (2016a), in 2016, the principal sector of Portuguese exports to the UK is the machinery, representing 22% of Portuguese exports to the UK, followed by the automobile sector (almost 15% of total exports to the UK). In the third position is the textile sector, expressing almost 12% of Portuguese exports to the British market. In terms of Portuguese imports from the UK, according to the OEC (2016b) the most important sector is the automobile sector (almost 20% of Portuguese imports from the UK), followed by the chemical one (almost 18%), machinery (17%), metals (8%) and, finally, in the fifth position comes the textile sector, representing 4.5% of total Portuguese imports from the United Kingdom. The Figure 5 reflects these numbers for each sector.

Fig.5 % of Market Share of each sector on UK-Portugal trade

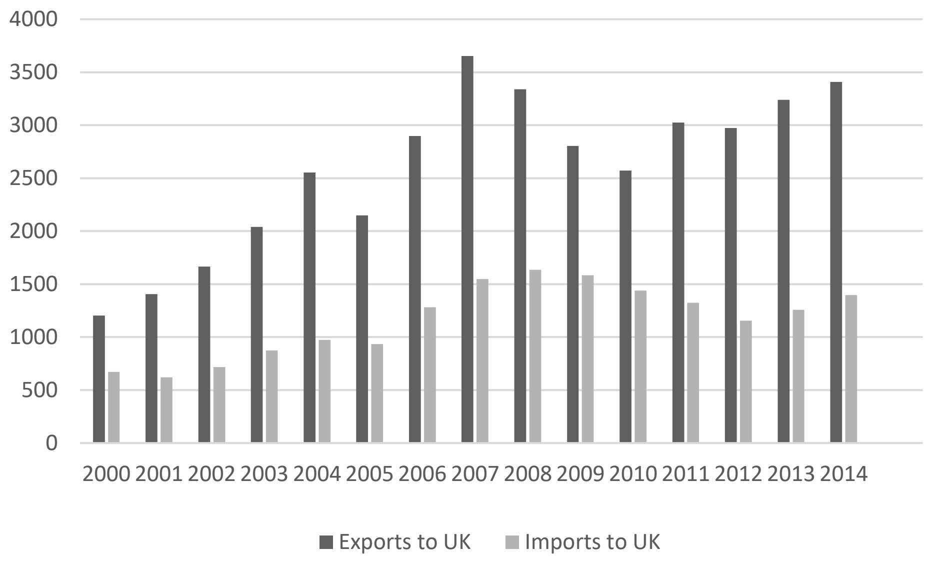


Source: Own elaboration based on OEC (2016a) and OEC(2016b)

3.2. Trade in services

In terms of services, the Comtrade database only provides information from 2000 until 2014. On all these years, Portugal presents a surplus, exporting more services than importing (see Figure 6).

Fig.6 Bilateral trade evolution with the UK (in terms of Services) (Million €)

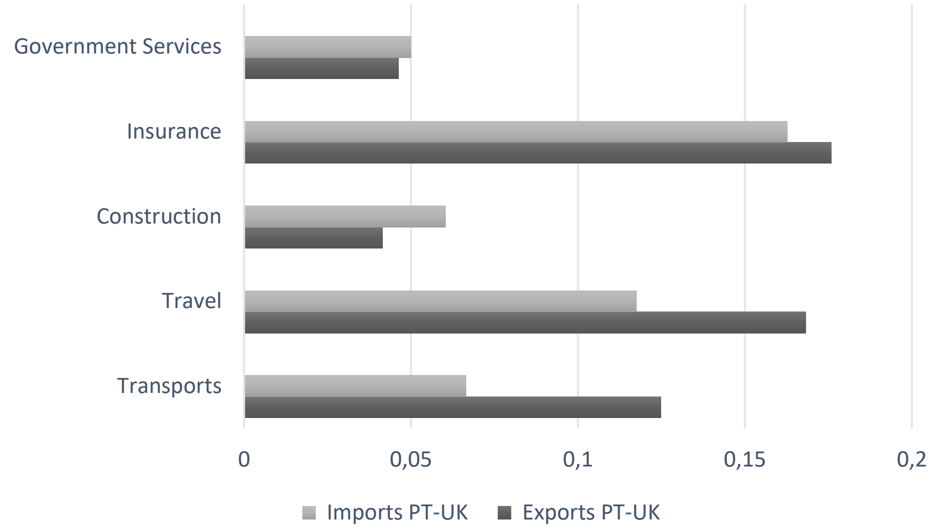


Source: Comtrade, 2014

The evolution was not uniform, experiencing the highest value on 2007 on both imports and exports. The flows follow similar paths, which means that in almost all the years when the exports increase the imports also increase. The Figure 6 also shows that on the last years it is visible a recover of the growth in terms of services exports to the UK after a period of decline between 2008 and 2010. Thus, according to Comtrade (2014a), in 2014, Portugal exported to the UK 3,407 million euros, representing 14% of its total services exports, and imported from the UK 1,397 million euros, meaning 11% of its total services imports. These are important numbers, as UK presents a crucial weight on the Portuguese commercial balance, which might be affected by Brexit.

Analysing some principal sectors, on Figure 7 we can see that Insurance and Travel are the services with the highest weight on both imports and exports, in 2014. In terms of Insurance service, Portugal exports to the UK 17.6%, while imports 16.3%. On the tourism sector, Portugal exports to the UK almost 17%, and imports almost 12%. The Transport service also assume an important amount in terms of exports, almost 12.5%, while in terms of imports is almost insignificant (0.066%).

Fig.7 Market Share of each service sector on UK-Portugal trade (%)



Source: Own elaboration based on Comtrade (2014b)

Although, globally, Portugal presents a negative commercial balance on merchandise trade, the Portuguese commercial balance with the UK is positive on both goods and services, and losing or decreasing the trade with the UK market would mean an even worst negative result. Moreover, the amount of exports to the UK has been increasing, and has experienced the highest values on the last years, this trend can be interrupted with the Brexit decision.

4. Methodology

The present work aims at analysing the expected impacts of Brexit on the Textile and Apparel Sector. In this section, it will be presented the methodological aspects and the process that will be implemented in order to collect data. This chapter will be divided into three parts: firstly, it will be introduced the contextualization of the methodological process (Section 4.1), followed by the analysis of the two phases of the process: the first phase is based on two interviews to Textile agents (Sections 4.2) and the second phase is a survey delivered to the Textile Portuguese managers in order to understand their perception about the potential impacts of Brexit on Portugal (Section 4.3).

4.1. Description of the process

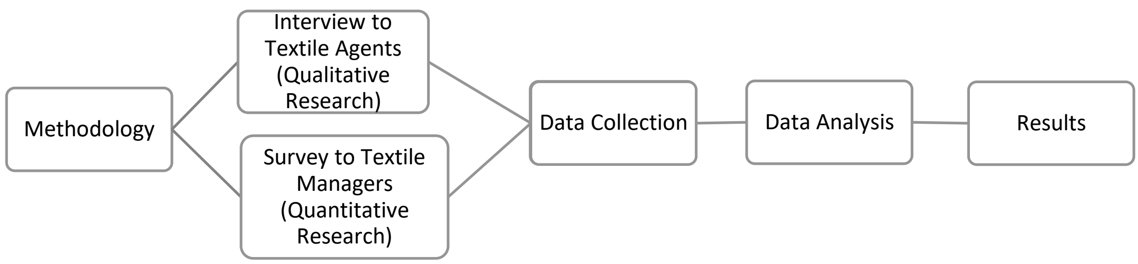
As Brexit is a very recent theme and the effective exit from the EU will happen only on 2019, at this moment becomes impossible to measure its impacts due to uncertainty enclosed on all the topics that Brexit involves. Further, the collection of data is very difficult to manage and the results obtained have a high probability of being unreliable or unstable, since the trade regulations, the UK financial obligations, among other topics are still being negotiated. Moreover, according to Black (2017) and Kierzenkowski *et al.* (2016), as Brexit is a very complex process, after the negotiations finish, the implementation and transactional period will be long, and the major impacts will only be felt after the actual UK's withdrawal. Hence, this research will focus on the managers' perceptions about the expected impacts that Brexit can cause on their companies, on the Portuguese Textile and Apparel Sector. Further, to achieve this goal, a combination of a qualitative and quantitative research will be followed based on primary data.

The methodological process will be divided into two parts. Firstly, this process will pass through the qualitative research with interviews to a Portuguese Textile agent and a British agent, who are intermediaries between Portugal and UK businesses and can better understand the impacts that Brexit may have on both parts, as well as the expectations that their clients and suppliers have about Brexit. Thus, the interview phase aims at analysing the perspective from both points of view, namely from a Portuguese agent and a British agent, about the expected impacts that Brexit may have on the commercial relationships between Portugal and the UK. On the second part, we will pass to the quantitative method, through a survey delivered to the Portuguese Textile companies. As mentioned previously, this survey procedure will be similar to the study done about Germany by Nothnagel and Heidenreich (2017), which analysed the Germany managers' perception concerning different aspects that

Brexit involves. Hence, the survey starts by the characterization of the company analysing the commercial relationship between the company and the UK market, in order to understand the importance of this market to the company. Theoretically, according to Nothnagel and Heidenreich (2017), the companies for which UK market represents a high market-share may have a more pessimistic expectation about the impacts of Brexit on their business. The second part of the survey focuses on understanding the short-term impacts that some Portuguese companies may have already felt, their perspective about the most important aspects of negotiations between two parts, and, finally, their expectations about the future of commercial relationship between Portugal and the UK.

This methodological process is synthetized on the Figure 8.

Fig. 8 - Methodology Process



Source: Own elaboration

4.2. First phase: Interviews

The agents' viewpoint, as was referred, assumes an extreme importance, as they are in the middle of the negotiation process, they have contact with the UK and Portuguese enterprises, and they see the different perceptions and impacts that Brexit have caused and may cause on both parts. Thus, with the interviews to the British Textile agent we can better understand the perspective of the UK's companies, and extrapolate that information to get conclusions about the consequences on the Portugal side, which will be complemented with the perception of the Portuguese agent.

The interview is semi-structured following the questions of the survey, which involves different topics, some concerning the short-term impacts, which the agents considered to have effect on trade, and their expectations about the future impacts of Brexit on the trade relationship between Portugal and the UK. The interview will also approach some questions concerning the probability of the UK to shift the textile business to another countries, in order to measure the likelihood of Portugal companies to lose UK clients, as well as if they think that a soft Brexit will be achievable, or in the hypothesis of the imposition of some trade barriers (Hard Brexit), will Portugal continue to be preferred as trade partner.

The interview to the Portuguese Textile agent took place on his office in Porto on 19th of April 2018. This agent works with the bedding textile products, having contact with diverse British enterprises, mainly located in England, however the agent prefers the anonymity.

Regarding the interview to British Textile agent, it occurred through e-mail, on the 24th to 26th of April 2018. This agent works with a multinational company in England, which imports from Portugal around 60% of its products. This company sells many different baby's products, from bedding textiles to furniture. This agent also choose to maintain the anonymity.

4.3. Second phase: Survey

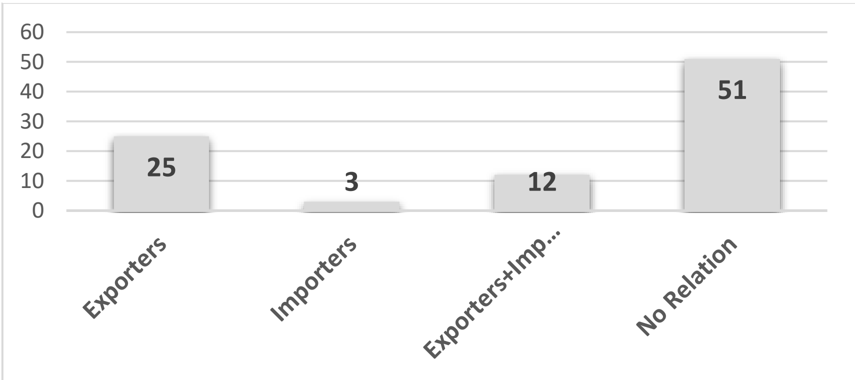
The structure of the survey starts with the companies' characterization, including the name of the company (Question 1), the type of relationship the company maintains with the UK (exporter, importer, both or none – Question 2), the weight of commercial transactions with the UK (Question 3), and, finally, the duration (number of years) of the commercial relationship with the British market (Question 4). Further, the survey will examine the Brexit impacts. In this way, Question 5 concerns about if the British decision about leaving the EU was a surprise. On the Question 6 we start the central part of the survey by measuring the short-term impacts already felt by the companies. Thus, the Question 6 inquires if the company have already felt the short-term impacts of Brexit, and the Question 7 is more particular, focusing on the already felt impacts of pound depreciation. The last part of the questionnaire is centred on a prospective view, related with the expectations about future and long-term impacts that managers may consider as more problematic and damaging. This part will comprise the priorities in terms of Brexit negotiations that managers perceive as the most important (e.g. Free Movement of Goods, Capital, People and Services, the Minimal Bureaucracy, among others – Questions 8 to 10). Finally, the last questions of the survey (Questions 11 to 13) cover the apprehensions about the future trade relation with the UK, determining the managers' optimism or pessimism about the future. The questionnaire is in appendix A.

4.3.1. Characterization of the sample

The survey was sent to 2238 companies, on the 21th of May 2018, being resent three times: on the 4th and 18th of June, and on 9th of July 2018. The questionnaire was directed was to the manager/director of the company and was answered by 99 companies, corresponding to an answer rate of almost 4.5%. However, only 91 answers are valid to support the results, because there are companies who answered twice to the survey, and others whose answers are meaningless, reducing the answer rate to 4%. To find the information of each company, it was used the Sabi database (on the 10th of May 2018), where it is defined the industry that we want to study - Textile and Apparel - and then we define some variables considered relevant to characterize the firm, namely, the contacts of the company to send the survey, the description of the activity and the number of employers.

Of the 91 companies that answered the questionnaire, 25 are exporters to the UK (27.5%), 3 are importers (3.3%), and there are 12 companies who are both importers and exporters (13.2%). The rest 51 companies (56%) have no commercial relationship with the British market. These numbers are summarized on the Figure 9.

Fig.9 Type of firms' commercial relationship with the UK

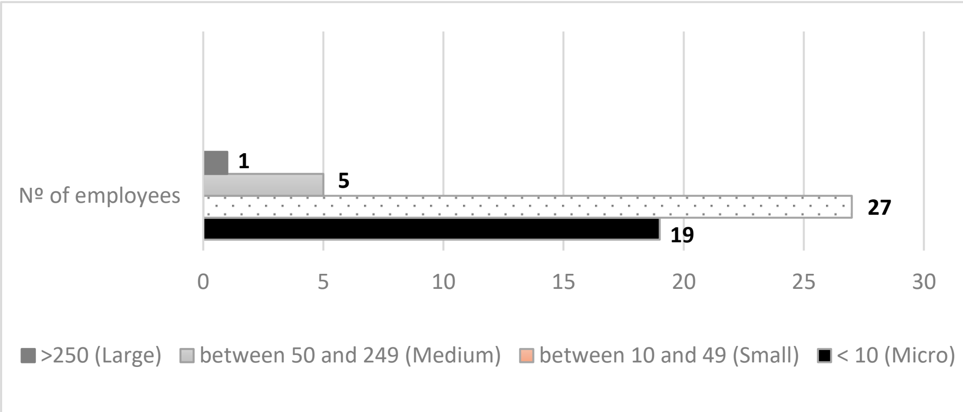


Source: Own elaboration based on survey's responses to the Question 2

Of the 91 companies, 55 allowed to be identified, by answering to the first question of the survey (60%). Of these 55 companies, 30 are specialized on apparel (54.5%), while 12 are producers of different types of textiles (bedding, towels, among others). The rest of companies, 6 are weavings and tissues manufactures, 5 are fabricators of apparel accessories (9%), and finally, 2 of companies are industrial dyeing and printing.

In terms of companies' size, we will analyse the number of employees. According to the National Statistics Institute (NSI), a company is classified as "Micro-company" if it has a number of employees lower than 10, it is "Small" if it has between 11 and 49 employees, "Medium" if it has between 50 and 249 employees, and "Large" if it has more than 250 employees. Considering the 52 companies for which we have information concerning the number of employees, 19 have less than 10 employees ("Micro" - 36.5%), 27 are "Small companies", 5 are "Medium" and only 1 company is "Large". We can see through the Figure 10 that the majority of companies that answered to the survey are small enterprises with less than 50 employees (representing almost 90% of the sample).

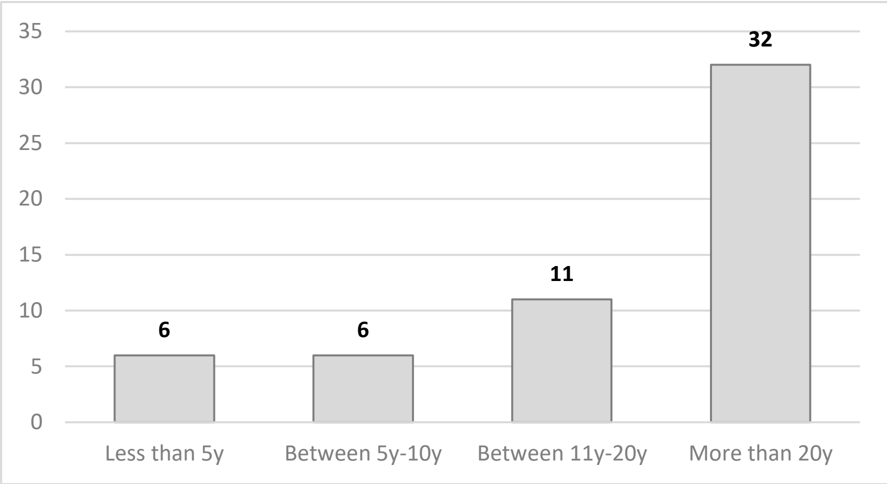
Fig.10 Characterization of companies in terms of Number of Employees



Source: Own elaboration based on Sabi´s database

We can also characterize our sample by the years of existence, in order to conclude if the companies are recent or with an old history. For this, we use a scale of 4 degrees: the recent companies with less than 5 years, between 5 and 10 years, between 11 and 20 years, and more than 20 years. We conclude that the majority of the companies (58.2%) of our sample is characterized by experienced companies with more than 20 years of existence, followed by 11 companies who are in the market for more than 11 years and less than 20 years. The more recent companies are in the same number, with 6 companies existing for less than 5 years and other 6 with an existence of between 6 and 10 years (Figure 11).

Fig.11 Characterization of companies in terms of Years of Existence

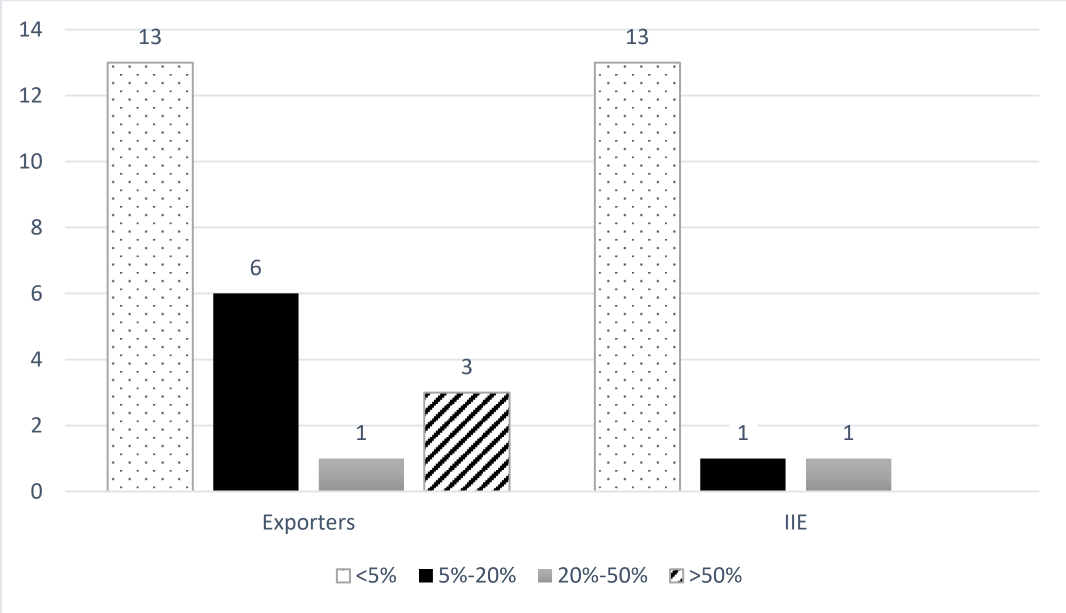


Source: Own elaboration based on Sabi´s database

Another remarkable aspect of our sample is that almost 82% of the companies are located on the North of Portugal, with only 8 companies on the Centre of the country (14.5%), and 1 company in the South (1.8%) and 1 in Azores (1.8%). These numbers are a reflection of the "Vale do Ave" Region, in which the Sector in analysis is recognized as forming a cluster in this region.

Focusing now on the weight of the commercial transaction with the UK (Question 3) we compare two groups of companies: exporters (E) vs. importers plus importers and exporters (IIE) (the number of importers is small – only 3 companies - we decided to join this group to the companies who export and import, reaching a total of 15 companies - 16.5% of the sample). For the majority of companies in both groups the weight of commercial transactions with the UK is less than 5%. From the exporters view, 13 companies have less than 5% (56.5%), 6 have between 5 and 20% (26%), 1 company has between 20 and 50%, and, finally, 3 companies sell more than 50% of its total sales to the United Kingdom (13%) (this question has a total of 23 answers, as the question is optional and 2 companies preferred not to answer). Regarding the IIE perspective, 86.7% imports less than 5% from the UK (13 companies), remaining 6.7% for the weight of 5% to 20% and 6.7% for between 20% and 50%. These percentages are presented on the Figure 12, in which we can find very similar characterization between the two groups.

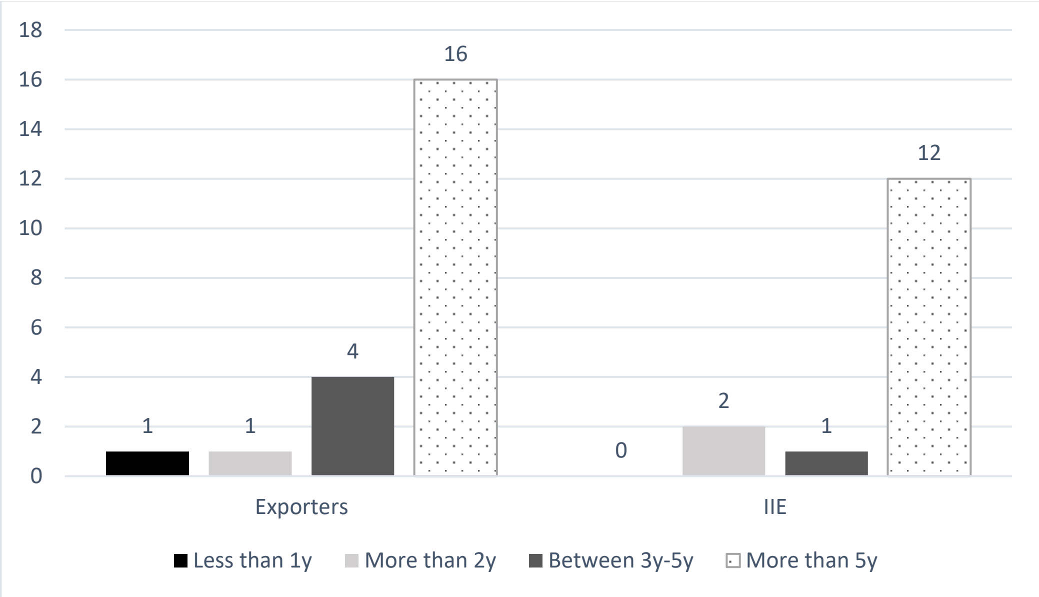
Fig.12 Weight of commercial transactions with the UK



Source: Own elaboration based on survey's responses to the Question 3

Concerning the Question 4 about the duration of the trade relationship with UK, the majority of both groups have a long commercial relationship with the UK (more than 5 years – more than 70%). From the exporters side, of the 22 companies that answered, 16 maintains a trade relationship for more than 5 years (72.7%), while 4 companies trade with UK for more than 3 years and less than 5, 1 company for more than 2 years and one company less than 1 year. On the IIE group, 80% of the companies trade for more than 5 years with the UK (12 companies), while only 1 and 2 companies trade for between 3 and 5 years, and more than 2 years, respectively (Figure 13). Once again it is visible a relatively similar pattern of both groups.

Fig.13 Duration of the trade relationship with UK (number of years)



Source: Own elaboration based on survey's responses to the Question 4

Regarding the last question of the sample's report about if British decision was a surprise for the Portuguese managers, it is notable an unexpected reaction, with almost 80% of the companies with commercial relationship with the UK answering "Yes", affirming that Brexit was a surprise for them. Thus, the British decision were already predictable by the majority of Portuguese Textile managers, who keeps the same opinion no matter the type of relationship maintains with the UK.

5. Results

In this chapter we will approach the results from the two sources of data collection: the interviews to the agents (Section 5.1) and the survey to the managers (Section 5.2).

While the interviews will focus on the prospective opinion of managers about the potential impacts of Brexit, the survey results will make a comparison between the perception of importers (IIE) vs. exporters, and on the question with relevance we will introduce a third group, the companies with no trade relationship with the UK.

5.1. Interviews

From the Portuguese Textile agent perspective, who was surprised with British decision, in terms of short-term impacts, he have already felt a fall on the sales due to a decrease on the demand for the Portuguese products from the British companies, since August 2017, mainly due to the pound depreciation. This effect was already also felt by Germany business, since the exports of goods to the UK decrease 3.5% during the last year (Nothnagel and Heidenreich, 2017). Concerning the expectations about the type of the future commercial relationship, he believes in a Soft Brexit, as he states "if a Hard Brexit happens, it is predicted to an increase of 10-15% on the custom duties, and consequently, an increase of prices of around 25-30%, which unavoidably leads to a higher demand for the Asian market". Thus, the agent considers that in the case of Hard Brexit, his British clients will change the Portuguese suppliers. In sum, even believing in a Soft Brexit, he trusts that the possibility of positive impacts for Portugal is highly unlikely.

From the British agent perspective, he disregards the Brexit impacts on Portugal as it is a very small country comparing to other European countries. He considers that Europe needs UK, and, consequently, there is a pressure to avoid changes in commercial relation, in order to not affect the Europe exportations to British market and vice-versa. Hence, from the scenarios available the British agent believes in the bilateral agreement – "Customs' Union" condition: it will be obtained an agreement with free movement of goods (without taxes), but with customs control, as with the withdrawal from Europe, the England will have different regulation from the EU members. As he states: "Europe exports more to U.K. then U.K. exports to Europe so it is in Europe's interest and advantage to make sure commercial relationship are maintained same as now. Free movement of goods without any tariffs. There will be customs control but no duty or any taxes."

To conclude, although it is predictable by the authors more damaging consequences to the UK than to the EU members, it is visible a pessimistic vision from the Portuguese agent, who trust in negative consequences for Portugal, even if soft, contrasting with the British agent, who has an optimistic opinion, disregarding completely the Hard Brexit possibility.

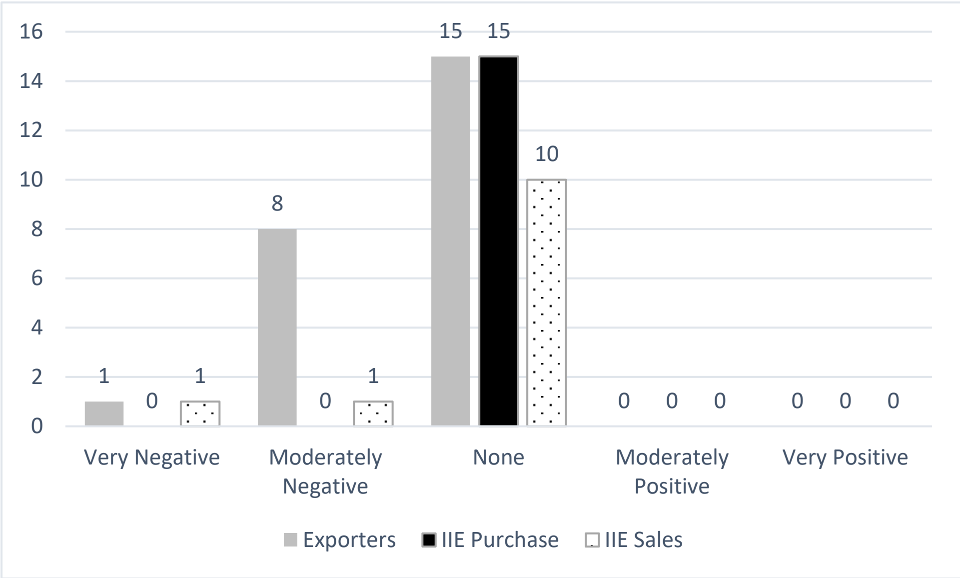
5.2. Survey

The main objective of the present work is to analyse the managers' perceptions regarding the impact of Brexit. Thus, on this section we will pass to the central part of the analysis, regarding the measurement of the short-term impacts already felt by the companies (Section 5.2.1), the managers' perception about the priorities of the negotiations (Section 5.2.2) and the prospective opinion about the impact of Brexit on the trade relationship between Portugal and the UK (Section 5.2.3). In this way, the analysis of the results will follow a comparison between the type of companies. It will focus on the answers of companies which maintains trade with the UK, comparing the exporters and importers' perspective. However, there are questions on the survey that we can also consider the answers of the companies with no trade with the UK, namely the ones regarding the priorities of the negotiations as well as their expectations about the future of the commercial relationship between Portugal and the UK. Thus, on these two topics the analysis will be between the three groups of enterprises. As was referred, as the sample of companies which are only importers is really small, with only three companies available, I decided to aggregate this group to the companies who export and import, reaching a total of 15 companies (16.5% of the sample). This way, we can achieve more reliable results from the importers' analysis.

5.2.1. Short-term impacts of Brexit

Starting now the measurement of the impacts already felt by the companies, in terms of short-term impacts (Question 6), in a general way, the companies have not felt significant impacts yet. Concerning the 24 of the exporters who answered to this question, 15 felt no impact (62.5%), against 8 who felt moderated negative impacts (33.33%) and one who felt very negative impacts (4.1%). Of the IIE group, as it includes exporters and importers, we have to distinguish the impacts felt on the exports and imports. There was an unanimity concerning the importers (Purchase part), with the 15 companies answering "None" impact felt. The impacts on the Sales part (exporters) is reported by 10 of the group as "None" (83.3%), one as "Moderately Negative" (8.3%) and one as "Very Negative" (8.3%). Comparing this result with the previous exporters group' result there is a similarity as the large majority felt no short-term impacts (Figure 14).

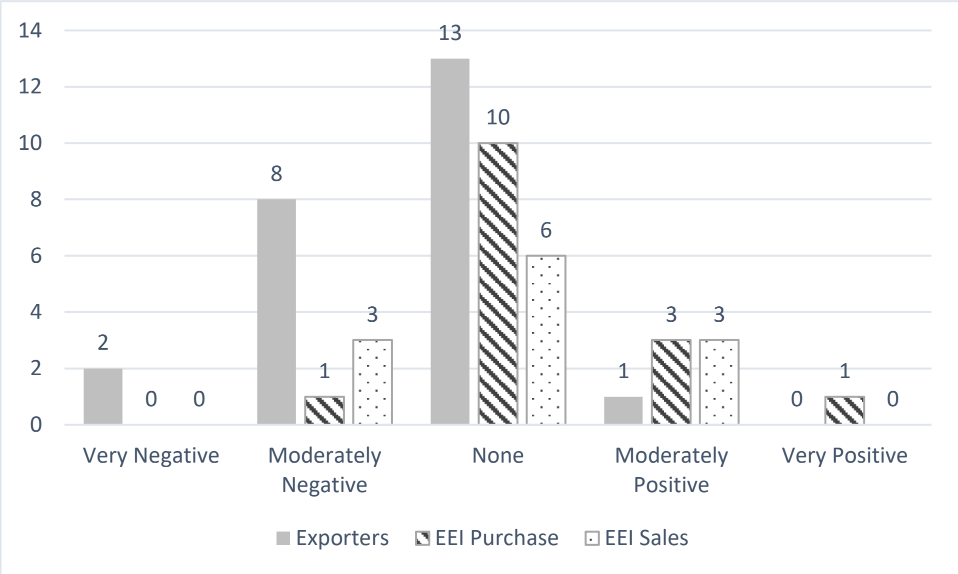
Fig.14 Short-term impacts of Brexit announcement



Source: Own elaboration based on survey's responses to the Question 6

Focusing particularly on the pound depreciation effects (Question 7), the majority of the exporters felt no impact (13 companies – 54.2%), while 8 felt "Moderated Negative impacts" (33.3%), 2 felt "Very Negative impacts" (8.3%) and one "Very Positive impacts" (4.1%). Concerning the IIE group, happens again a division between the import side, and export side. Concerning only the Purchase side, it is visible a high density on the "None" option by 10 of the companies (66.7%), and the other 5 companies are dispersed by the "Moderately Negative" (1 company), the "Moderated Positive" (3 companies) and "Very Positive" (1 company). Regarding the Sales part, 50% of the sample (6 companies) felt no impact, while the other 50% is equally divided between the Moderated measures. So, in general, even if the majority have felt no short-term impacts, there is a "relevant" percentage of the companies who felt negative impacts, mainly the exporters, even if in number represent few companies as the sample size is small. These results are summarized on the Figure 15.

Fig.15 Pound depreciation impacts



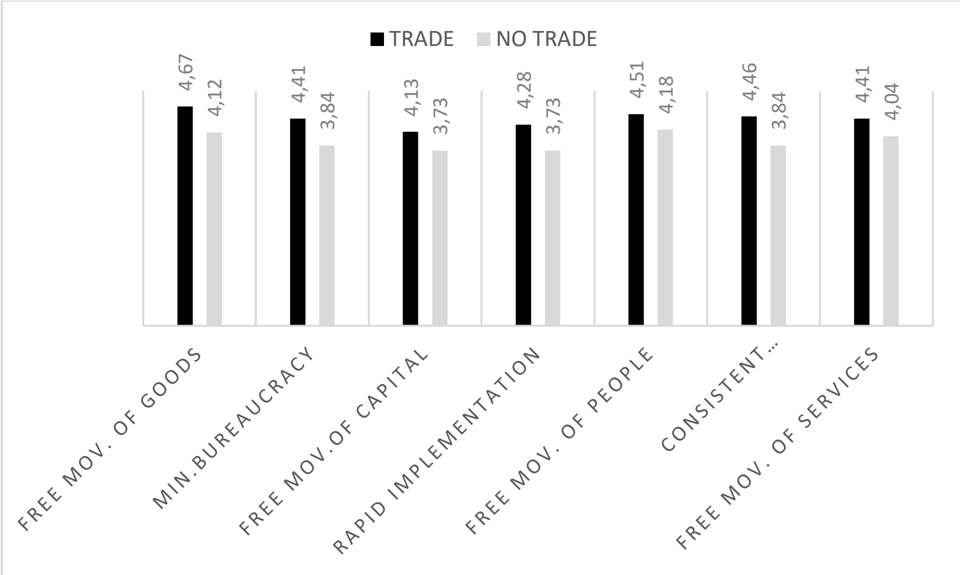
Source: Own elaboration based on survey's responses to the Question 7

Comparing these results with the ones reached by Nothnagel and Heidenreich (2017), in terms of short-term impacts, the Germany managers felt that the uncertainty surround Brexit had worsening significantly the businesses, with a fall on the exports to the UK of around 3.5%. This conclusion contrast with Portugal results as for the majority of Portuguese companies have felt no short-term impacts.

5.2.2. Priorities on the Brexit negotiations

Regarding now the analysis of the aspects of negotiations, on the Question 8 it is asked to the manager to rate the different priorities in a Likert scale, from 1 (no importance) to 5 (very important), obtaining the Table A of the Appendix B and the Figure 16. At this question the companies with no trade with the UK are able to answer. Although the result of the answer may depends on the type of relation that the company maintains with the UK, for instance companies who trade with the UK may have a higher preference for the Free Movement of Goods comparing with the group without trade, this question represents a general perception of a manager with a social opinion no matter the type of relation that the company keeps with the British market. Thus, at this point, raise a comparison between companies with trade (Exporters and IIE – TRADE Group) vs. companies with no trade with the UK (NO TRADE).

Figure 16 Average of classification of the aspects on negotiations in a scale from 1 to 5



Source: Own elaboration based on survey's responses to the Question 8

Through the Figure 16, we see that "NO TRADE" group give a higher importance to the social aspect of Free Movement of People than to the Free Movement of Goods. This group with no commercial relationship, in average, only rates three of the aspects with more than 4: Free Movement of People, Free Movement of Goods, and Free Movement of Services, which are the most important pillars of the Single Market. Moreover, all the aspects have lower importance for them than for companies with trade. Thus, stays clear that this group is much lower concerned about the Brexit topics than the companies that maintains a trade partnership with the UK. In order to conclude if effectively the importance attributed to the negotiations depends on the fact that company maintains or not a trade relationship with the UK we compare the average of two groups through a T-Test, testing the following hypothesis:

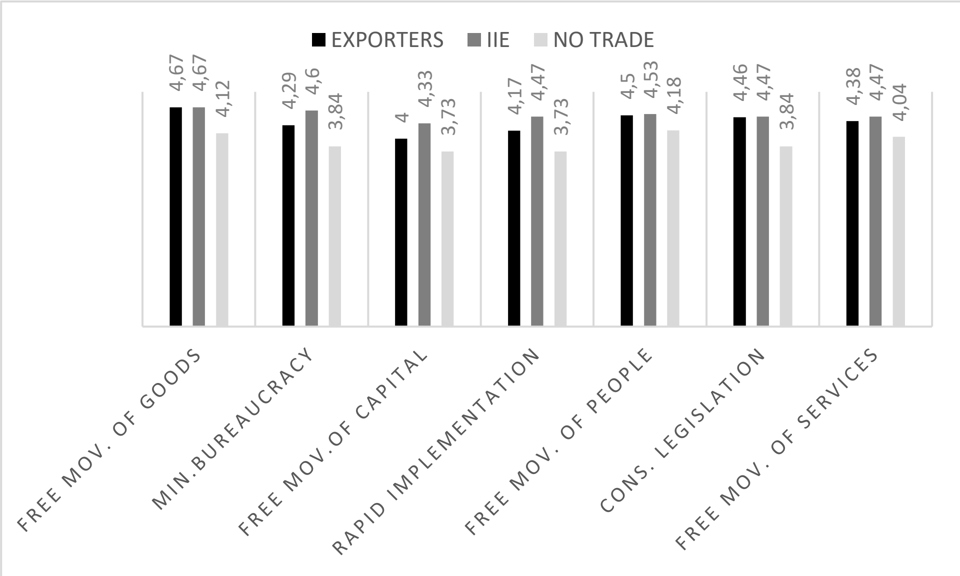
Ho: the average of two groups is not significantly different.

H1: the average of two groups is significantly different.

We obtain a t=5.1 and a p-value=0 (the SPSS results are on Appendix C). The p-value=0 is always lower to any level of significance (α). For instance, for a level of 5%, p.-value=0<α. So, we reject HO, and conclude H1, i.e, the average of the classification of companies with trade with the UK is significantly different from the average of the companies with no commercial relationship with the UK. So, we can conclude that the importance attributed to the aspects of Brexit' negotiations depends on the type of relationship that the company keeps with the UK.

Doing now a more precise analysis by disaggregating the TRADE group, in order to compare the exporters and IIE perception about his topic, we obtain the following Figure 17:

Fig.17 Average of classification of the aspects on negotiations in a scale from 1 to 5



Source: Own elaboration based on survey's responses to the Question 8

It is consensual that exporters and importers are on the same side at this question. They give an extreme importance to all the aspects of negotiations being all scored in average with a scale higher than 4, both considering the aspect with higher importance the "Free Movement of Goods" and with the lower importance the "Free Movement of Capital". Doing a t-test to test if the means between the two groups (Exporters vs. IIE) are significantly different, we obtain a t=-1.649 and a p-value=0.125, so we can conclude that the means between the companies with trade are not significantly different. Thus, the rates of both are very similar in all the aspects. This result also reflects the conscious that managers attribute to this topic, as the final agreement that result from these negotiations will influence all the consequently impacts felt in Europe. For instance, to achieve the Free Movement of Goods (recorded as 4.67 by both) will be crucial to minimize the impacts on economies felt by both parts, since reaching the most closed agreement to the Single Market conditions would be the "ideal" situation in terms of minimization of the impacts for both parts, preventing the imposition of tariffs and trade barriers, as we referred before. The Free Movement of People (also included on the Single Market) is also a subject that worries the managers not only concerning the impacts on their company, but mainly, due to the impacts that it would have on society. And, finally the Minimal Bureaucracy, scored by the importers with 4.6, the second aspect more important, worries the managers in terms of fill formal customs declaration, export licenses, among others. For the companies with no trade with the UK, we can see that, although the averages are all higher than 3.7, the importance attributed to the aspects of negotiations is lower when comparing with the exporters and IIE groups.

The Question 9 gives the option to the manager insert other aspect of negotiations that may consider important, and only one company has answered: "Exchange Rate Policy".

Studying now the order attributed to the most tree important aspects of the negotiations by the managers, on the Question 10, we achieve the following Table 5:

Table 5 – Classification of top 3 of the aspects of the negotiations

	1º	2º	3º	
	EXPORTERS (19 COMPANIES)			**TOTAL**
FREE MOVEMENT OF GOODS	18	1		**19**
MIN. BUREAUCRACY		3	6	**9**
FREE MOVEMENT OF CAPITAL		7	2	**9**
RAPID IMPLEMENTATION		2	1	**3**
FREE MOVEMENT OF PEOPLE	1	4	7	**12**
CONSISTENT LEGISLATION		1	2	**3**
FREE MOVEMENT OF SERVICES		1	1	**2**
	IMPORTERS/IMPORTERS+EXPORTERS (8 COMP.)			
FREE MOVEMENT OF GOODS		3	5	**8**
MIN. BUREAUCRACY	1	3	3	**7**
FREE MOVEMENT OF CAPITAL			1	**1**
RAPID IMPLEMENTATION		1	2	**3**
FREE MOVEMENT OF PEOPLE	3			**3**
CONSISTENT LEGISLATION		1	2	**3**
FREE MOVEMENT OF SERVICES		1	1	**2**
	GLOBAL –TRADE (27 COMPANIES)			
FREE MOVEMENT OF GOODS	18	4	5	**27**
MIN. BUREAUCRACY	1	6	9	**16**
FREE MOVEMENT OF CAPITAL	0	7	3	**10**
RAPID IMPLEMENTATION	0	3	3	**6**
FREE MOVEMENT OF PEOPLE	4	4	7	**15**
CONSISTENT LEGISLATION	0	2	4	**6**
FREE MOVEMENT OF SERVICES	0	2	2	**4**
	NO TRADE (38 COMP.)			
FREE MOVEMENT OF GOODS	20	5	13	**38**
MIN. BUREAUCRACY	1	4	5	**10**
FREE MOVEMENT OF CAPITAL	2	6	3	**11**
RAPID IMPLEMENTATION	1	4	2	**7**

FREE MOVEMENT OF PEOPLE	8	8	6	**22**
CONSISTENT LEGISLATION	2	1	4	**7**
FREE MOVEMENT OF SERVICES		4	10	**14**

Source: Own elaboration based on survey's responses to the Question 10

On table 5, we can see that the Free Movement of Goods is clearly the main priority aspect of negotiation for all the groups. On this Question we see a more different opinions between the Exporters and the IIE group: the exporters are more centred on 4 aspects, which they considered as more priority – Free Movement of Goods, People, Capital and Minimal Bureaucracy, while the IIE group are more dispersed, with 8 managers including the Free Movement of Goods, and 7 the Minimal Bureaucracy in the top 3 of negotiation's importance. The other aspects have a high dispersion of opinion. A very interesting curiosity between all the groups is that all the companies that answered the question attributed 1º, 2º or 3º rate to the "Free Movement of Goods". Comparing the companies with trade with companies without trade, we see more similarities than the previous question, as the only big difference found is the "Free Movement of Services", which is the third most important priority for the NO TRADE group, while is the last priority for the companies who trade with the UK.

Hence, this analysis of the aspects of negotiations allows us to conclude that the "Free Movement of Goods" assumes clearly the highest importance by the managers, which is understandable due to the high probability of Brexit cause harmful consequences on the trade between Portugal and the UK, affecting the stability of the companies. Avoid the imposition of trade barriers, customs legislations and bureaucracies and, consequently, higher trade costs is the priority at this moment to the companies.

Making the comparison with Germany preferences concerning the priorities on negotiations, the results are not unanimous between the two countries.

Table 6 – Comparison between Portugal and Germany perception in terms of priorities on the negotiations

	Free Mov.Goods	Free Mov. Persons	Free Mov. Services	Min. Bureaucracy	Rapid Implem.	Free Mov. Capital	Consis. Legisl.
Portugal	1ª	2ª	3ª	4º	5º	6º	7º
Germany	1º	7º	5º	2º	4º	3º	6º

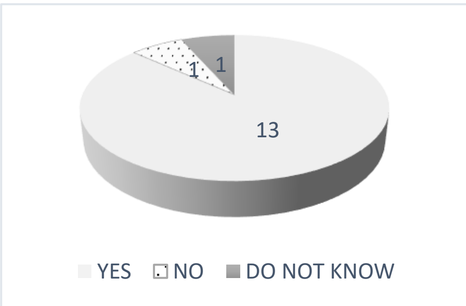
Source: Own elaboration based on the studies done in Portugal vs. Germany

Through the Table 6, stays clear that the Free Movement of Goods assumes the principal priority on negotiations as the prevention of imposition of trade barriers becomes crucial concerning the minimization of trade costs, as we concluded on the literature. The other cells highlighted focus on the other priorities that assumes similar importance to both countries, as "Consistent Legislation" seems not so important, and the "Rapid Implementation" has a medium significance to the managers. The discrepancy on the opinion of the managers focus on the "Free Movement of Persons" which to Portugal assumes a high importance, contrarily to Germany, being on the last position. This demonstrates a less importance attributed by the German managers to the social problems that Brexit will also cause, because, according to the Pordata (2016d), the emigration tax of German is higher (even if not significantly) comparing with the Portuguese tax, so the Germany managers should be more conscious about the problems that Germany' emigrants on the UK may face with Brexit.

5.2.3. Expectations about the future trade relationship

Passing now to Question 11 analysis, which is only directed to the IIE group concerning the possibility of the Portuguese company change UK as supplier in the case of Hard Brexit, where trade barriers are imposed.

Fig.18 Possibility of the Portugal to change the UK as its supplier

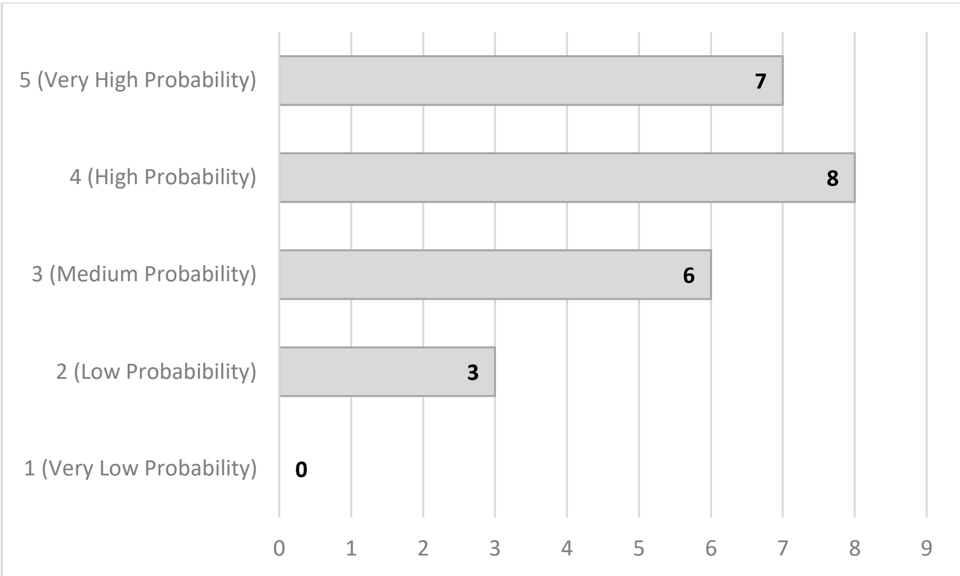


Source: Own elaboration based on survey's responses to the Question 11

Through the Figure 18, it is clear a certainty from the IIE group to this question. From the 15 companies, 13 answered "Yes" (86.7%) when facing the hypothesis a Hard Brexit with an introduction of trade barriers, and consequently, higher cost associated to the importations of raw-materials from the UK. The rest 13.3% of the companies (2 companies) are divided between the "No" and "Do Not Know".

The Question 12 follows the same logic but for the Exporters group, if in case of Hard Brexit they think that the UK will change their Portuguese suppliers, measuring the likelihood of Portuguese companies lose their British market. The managers have available to this question a Likert-Scale from 1 to 5, where “1” means a “Very Low Probability” of the UK change Portugal as its supplier, and “5” means a “Very High Probability”. Results are synthetized on Figure 19.

Fig.19 Likelihood of Portugal lose UK market

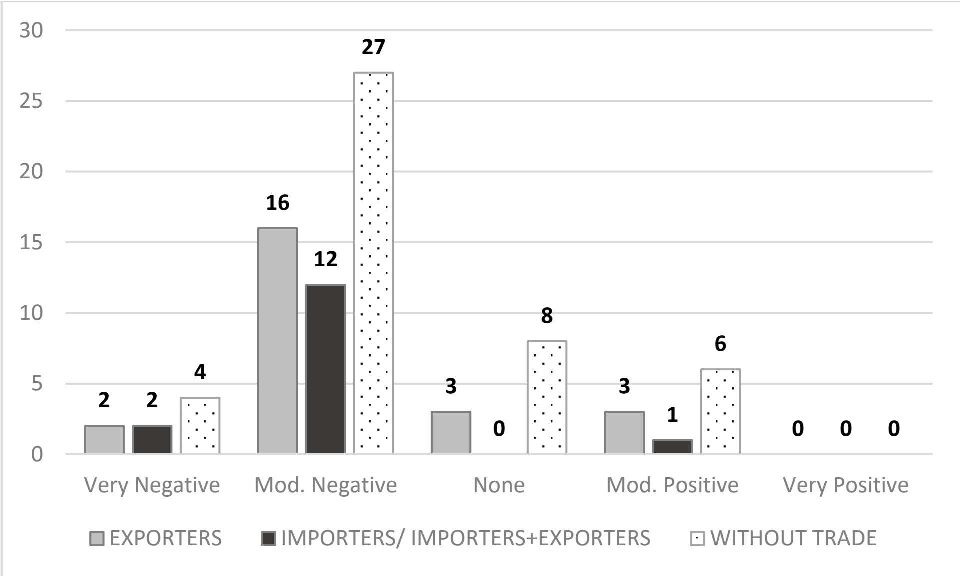


Source: Own elaboration based on survey’s responses to the Question 12

On this question the unanimity is not so evident and it is visible “less negative” perception from the exporters when comparing to the IIE group. From the 24 companies who answered to this question, 7 consider a very high possibility of UK change Portugal as its supplier, and 8 a high probability, which completes a 62.5% of the exporters who presents a negative expectation towards the hypothetical consequences of a Hard Brexit. On the other side, we have 6 companies who consider that have no certainty on this question, so rate the question with “3”. And, finally, we have 7 companies who have a more positive perception and believe in a low possibility of Portugal companies lose the UK market with a Hard Brexit.

Concluding this analysis, the final question of the survey concerns the managers’ expectations about the potential impacts that Brexit may cause on the future trade relationship between Portugal and the UK. Answers are synthetized on Figure 20.

Fig.20 Potential impact that Brexit may have on the future commercial relationship between Portugal and UK



Source: Own elaboration based on survey's responses to the Question 13

Given the huge uncertainty around Brexit, this last question becomes crucial to understand the personal expectation of each manager about the potential impact that Brexit may cause on Portuguese economy. In a general mode, on the Figure 20, we can conclude that no matter the type of relationship that the company maintains with the UK, the majority of the managers presents a negative vision about the future of relationship between the two countries: of the total of 84 companies that answered to this question (75% of the sample) 63 presents a pessimism relatively to this topic, against 10 who presents a positive impression about the future (almost 12%). When considering the type of relation that company keeps with the UK, we see that in the NO TRADE group, 6 companies considering moderately positive effects and 8 "No Effects". Only one IIE and 3 exporters consider the "Moderated Positive" option. The "Moderated Negative" option is the one with more centred opinions, with 16 of the exporters (66.7%), 12 of the IIE (80%) and 27 of the NO TRADE (60%). Although these numbers reflect the negativism associated with this topic, these managers expect a Soft Brexit result, which will create "soft/moderated" damaging consequences to Portugal. The "Very Negative" category, which is perceived as a high possibility of a Hard Brexit happens, is only predicted by two exporters (8.3%), two IIE (13.3%) and 4 NO TRADE (8.9%).

Through this overall analysis, we can conclude that even if the British market is not very relevant to these companies, as it represents less than 5% of its market share to the majority of them, and the already impacts that they have felt were not very significant, the managers assume a negative position towards the potential impacts that Brexit may cause on the trade relationship between Portugal and the UK, no matter the type of relationship that the company maintains with the UK, as we saw on the results of Question 11, 12 and 13.

Making the parallel analysis with the Germany study, which have concluded that importers and the companies with a high percentage of weight of trade with the UK are the most pessimistic. We can confirm on the Figure 18 and 20 the pessimism reflected by the importers, as only one company of the IIE group believe in positive impacts of Brexit on future. So although the worst short-term impacts were felt by the exporters, the importers are more pessimistic about the future. Regarding the second part of conclusion, it is also verified by the singular analysis, as of the four Portuguese companies with more than 50% of trade with the UK, three expect moderated negative impacts and one very negative impacts on the businesses with the UK. Moreover, by identifying the four companies from the TRADE group that expect "Very Negative Impacts" on the Question 13 on the Sabi database, we find that three exports to the UK between 5% and 20% of its sales and one more than 50%, which means that are companies to which the UK have a significantly weight. In general, both Portuguese and Germany's managers are expecting to their business with the UK get worst in the upcoming months, showing a negative perspective towards Brexit.

6. Conclusion, limitations & further implications

The main objective of this research is to explore the potential Brexit impacts on Portugal, particularly on the Textile and Apparel sectors, through the managers and agents' perspective. Thus, based on a survey, the results indicate that in the evaluation of a restricted sample (91 companies), the exit of the UK from the European Union will affect negatively (in a moderated way) the trade partnership between the UK and Portugal. Although the magnitude of this effect is unknown since the negotiation are not finished yet, the managers trust in a soft result, as the short-term impacts felt by them did not have a huge significance. Even if the short-terms were not significant to the Portuguese companies, it is visible that Portuguese Textile companies are expecting that Brexit will generate negative impacts on their businesses with the UK. It seems that companies believe in a Soft scenario, as they are not trusting in very negative consequences, however they predict that their trade with the UK may will have limitations in terms of trade barriers and bureaucracy implications.

However, if a Hard Brexit happens both Portuguese importers and exporters predict a change of UK and Portugal as supplier, respectively. The main conclusion of a negative expectation of the impacts in Portuguese economy due to Brexit is similar to the ones reached by Vega *et al.* (2018) and Bergin *et al.* (2016) in Ireland, who for all type of scenarios predict negative impacts on Irish output. On Romania, equally to Portugal, Stanciu (2017) also predict negative impacts on Romania's economy. Besides these studies, we have the principal study done about Germany by Nothnagel and Heidenreich (2017), as was referred previously, which was the based to construct the survey to Portuguese managers. In a general view, there was some similarities between the two countries concerning the type of companies which present a more pessimistic opinion about the potential impacts that Brexit may cause in their own country (the companies with the highest percentage of trade with the UK and importers are more pessimistic than exporters), as well as the first priority in negotiation for the companies, which is the "Free Movement of Goods". The main differences are centred on the short-term impacts felt by the companies and the ranking of priorities. Thus, we can conclude that the main result of this research is in line with the other authors that studied other European countries, even if using or not different methodologies.

In addition to this, we found another important conclusion when comparing the two main groups of companies: TRADE vs. NO TRADE. The importance attributed to each aspect of negotiation depends on if the company maintains or not a trade partnership with the UK. It is visible a lower importance attributed to this topic by companies that have no commercial relation with the UK.

However, this research presents some limitations. Firstly, as the Brexit happens very recently, the number of studies about its impacts is very limited and the ones that exist only focus on the UK side. Moreover, these available researches focus on the same points and are developed under a huge uncertainty, centring on the short-term impacts, as the long-term impacts are unmeasurable at this point. Due to this last limitation, the results of this study is based on Portuguese managers' perception about different topics around Brexit, however the answer rate is very low and the majority of the firms who answered the questionnaire has a low weight of UK market share, which do not allow to obtain sustained or high reliable results. As we see from our sample the companies with higher percentage of trade with the UK are the most pessimistic ones, but our general conclusion is that Brexit will create moderated negative. This can happen due to the fact that our sample is characterized by a low percentage of trade with the UK. Moreover, although the interviews to the agents analyse two different perspectives, these interviews only focus on one-way relationship: Portugal as supplier and the UK as client. So the inverse way (Portugal as client and UK as supplier) is disregarded in this analysis.

Therefore, this research can create impacts in terms of companies' management. Firstly, this study aims to warn managers for the high probability of damaging consequences of Brexit on their companies. If the free movement of goods is not achieved, implying the imposition of trade barriers and trade bureaucracies, and, consequently, higher transaction costs, the exporters will be forced to increase their prices, and the possibility of UK change to other markets, mainly China and U.S is very likely. Moreover, for companies with a high percentage of trade with the UK (the most pessimistic ones), who is not a majority on our sample, it is advisable to fix the exchange rate of their sales, in order to avoid the cambial risk, and, most important, to diversify the risk by searching for another markets, otherwise losing the UK clients may lead to the bankrupt of these companies.

To conclude, following the recent news of Euronews (2018), until June of 2018 the negotiations were delayed causing doubts if the March of 2019 will be a possible date of exit. Actually, at August of 2018 the ministers have compromised to do the negotiations in a continuous way in order to avoid an exit without a defined and complete agreement. They affirm that points as the value that UK must pay to leave and the immigrants' rights are almost finalized. According to Euronews, a study made by the Sky Data find that 65% of British population predict a Hard Brexit scenario, and 50% of population want a new referendum, while 40% do not accept and 10% do not know which side may opt. International Monetary Fund argues that Brexit impacts won´t be equally to all European countries, being the most negatively affected ones: Irland, Netherlands and Belgium. Although the possibility of an exit without an agreement be a much cited option by the ministers, at this moment, the uncertainty around Brexit remains very high, being impossible to make a reliable conclusion about the real impacts that Brexit will cause.

References

Begg, I. (2017), “Making Sense of the Costs and Benefits of Brexit: Challenges for Economists”, *Published Online: 7 August 2017*, pp.300-314.

Belke, A. & Gros, D. (2017), “The Economic Impact of Brexit: Evidence from Modelling Free Trade Agreements”, *International Atlantic Economic Society 2017,* pp.318-331.

Bergin, A., Garcia-Rodriguez, A., Morgenroth, E. L. W., & Smith, D. (2017), “Modelling the medium- to long-term potential macroeconomic impact of brexit on Ireland.”*, Economic and Social Review, 48(3)*, pp. 305–316.

Black, A. (2017), “Hard Brexit, International Trade and the WTO Scenario”, *The Federal Trust for Education & Research.*

Bouoiyour, J. & Selmi, R. (2016), "Brexit concerns, UK and European equities: A lose-lose scenario?", *Economics Bulletin, Volume 36, Issue 3*, pp.1686-1693.

Crafts, N. (2016). The Growth Effects of EU Membership for the UK : Review of the evidence. *Global Perspectives Series; Paper 7. Social Market Foundation*, pp.2-24.

Dhingra, S., Machin, S., & Overman, H. G. (2017a), “The Local Economic Effects of Brexit”, https://doi.org/10.1177/002795011724200112.

Dhingra, S., Huang, H., Ottaviano, G., Pessoa, J., Sampson, T. & Reenen, J. (2017b), “The Costs and Benefits of Leaving the EU : Trade Effects (1478)”, *CEP Discussion Paper No 1478, April 2017.*

European Movement International. (2016), “The consequences of a British exit from the European Union”, 11. Retrieved from http://europeanmovement.eu/wp-content/uploads/2016/05/EMI_16_PolicyPosition_Brexit_17_VIEW_FINAL.pdf.

Goodwin, A. (2017), “Brexit – Customs borders will impose costs and delays”, *Oxford Economics.*, pp.11-pp.18.

Kazzazi, F., Pollard, C., Tern, P., Ayuso-Garcia, A., Gillespie, J., & Thomsen, I. (2017, October 4), “Evaluating the impact of Brexit on the pharmaceutical industry.”, *Journal of Pharmaceutical Policy and Practice.* BioMed Central Ltd. https://doi.org/10.1186/s40545-017-0120-z, pp.1-pp.12.

Kierzenkowski, R., Pain, N., Rusticelli, E. and Zwart, S. (2016), "The Economic Consequences of Brexit: A Taxing Decision", *OECD Economic Policy Paper*, pp.1-35.

Lawless, M., & Morgenroth, E. L. W. (2016). Working Paper No. 550 November 2016,*"The Product and Sector Level of a Hard Brexit across the EU" (*550).

Nothnagel, I., and Heidenreich, K. (2017), "The Impact of Brexit on German Businesses", *Deutscher Industrie und Handelskammertag e.V. (DIHK),* pp.1-7.

Prins, C. (2017), "Brexit: the impact for Dutch business", *RaboResearch Global Economics & Markets*, pp.1-7.

Rehn, O. (2014), "Economic and Monetary Union and the Euro: For Stability, Growth, and Prosperity across the Europe", *Luxembourg: Publications Office of the European Union*, pp.1-20.

Sampson, T. (2017). "Brexit: The Economics of International Disintegration", *Journal of Economic Perspectives*, Vol.31, nº4, pp.163-pp.184. https://doi.org/10.1257/jep.31.4.163.

Schelkle, W. (2016), "Financial Centre and Monetary Outsider: How Precarious is the UK´s Position in the EU?", *The Political Quarterly, Vol.87, No.2*, pp.157-165.

Slater, A. (2016), "Will Brexit speed a seismic shift in UK trade patterns?", *Oxford Economics*, pp.13-17.

Stanciu, S. (2017), "Brexit Impact on Romania's Economy", *Conference Paper – November 2016: "Proceedings of the 28th International Business Information Management Association Conference"*, pp.2307-2315

Vega, A., Espino, R. and Valero, M.(2018), "The potential impact of Brexit on Ireland's demand for shipping services to continental Europe", *Article in Transport Policy*.

Webibliography

Comtrade (2016a), *Trade between Portugal and UK in terms of goods*, Available at https://comtrade.un.org/data/ . Accessed on 10.02.2018.

Comtrade (2016b), *Trade between Portugal and UK in terms of services*, Available at https://comtrade.un.org/data/ . Accessed on 10.02.2018.

Comtrade (2016c), *Bilateral Trade Evolution of Portugal with the UK in terms of goods*, Available at https://comtrade.un.org/data/ . Accessed on 10.02.2018.

Comtrade (2014a), *Bilateral Trade Evolution of Portugal with the UK in terms of services,* Available at https://comtrade.un.org/data/ . Accessed on 10.02.2018.

Comtrade (2014b), *What Portugal exports and imports in terms of services to the UK?*, Available at https://comtrade.un.org/data/. Accessed on 10.02.2018.

Euronews (2018), *Brexit News*, Available at http://pt.euronews.com/tag/brexit. Accessed on 28.08.2018.

European Commission (2017a), *The Single Market Definition*, Available at European Commission Official Site: https://ec.europa.eu/growth/single-market_en . Accessed on 27.11.2017.

European Commission (2017b), *The Free Trade Area*, Available at European Commission Official Site: http://ec.europa.eu/ecip/help/glossary/index_en.htm#f. Accessed on 10.01.2018.

European Commission (2017c), *The Customs Union*, Available at European Commission Official Site: https://ec.europa.eu/taxation_customs/facts-figures/eu-customs-union-unique-world_en. Accessed on 29.11.2017.

European Commission (2017d), *Stability, a Single Currency, Mobility and Growth*, Available at European Commission Official Site: https://europa.eu/european-union/about-eu/eu-in-brief_en. Accessed on 28.11.2017.

OEC (2016a), *What does Portugal exports to the UK in terms of goods?,* Available at The Observatory of Economic Complexity:

https://atlas.media.mit.edu/en/visualize/tree_map/hs92/export/prt/gbr/show/2016/. Accessed on 30.12.2017.

OEC (2016b), *What does Portugal imports from the UK in terms of goods?,* Available at The Observatory of Economic Complexity:

https://atlas.media.mit.edu/en/visualize/tree_map/hs92/import/prt/all/show/2016/. Accessed on 30.12.2017.

Pordata (2016a), *EU Imports and Exports to the UK*, Available at

https://www.pordata.pt/DB/Europa/Ambiente+de+Consulta/Tabela. Accessed on 30.12.2017

Pordata (2016b), *Portuguese Exports in terms of goods*, Available at

https://www.pordata.pt/Portugal/Exporta%C3%A7%C3%B5es+de+bens+total+e+por+principais+pa%C3%ADses+parceiros+comerciais-2346. Accessed on 30.12.2017.

Pordata (2016c), *Employment per activity sector*, Available at http://www.pordata.pt/Portugal/Emprego+total+e+por+ramo+de+actividade++equivalente+a+tempo+completo+(base+2011)-2296. Accessed on 16.11.2017.

Pordata (2016d), *Germany Emigration tax vs. Portuguese Emigration tax*, Available at https://www.pordata.pt/DB/Europa/Ambiente+de+Consulta/Tabela. Accessed on 07.09.2018.

Appendix

A. Survey about "The Expected Impacts of Brexit on the Portuguese Textile companies"

After the referendum, where the UK population said "YES" to Brexit, on March 2017 the UK announced officially the withdrawal from the European Union. This survey aims to evaluate the managers' perception about the expected impacts of Brexit on their companies. All the information is confidential, and it will be treated in aggregated terms and used exclusively to academic objectives.
Please try to answer to all questions, and they should be answered by a member of the administration.

A. Company Profile

1. Company's Name: ____________________

2. Indicate if your company keeps a commercial relationship (in terms of exports/imports) with the UK. In case of a negative answer please answer only to the questions 8, 9, 10 e 13. In case of a positive answer, please answer to all questions.

	Yes	**No**
Exporter	☐	☐
Importer	☐	☐

3. Indicate the weight of the commercial transactions with the UK.

	>5%	**5%-20%**	**20%-50%**	**>50%**
Exporter (in terms of %Sales)	☐	☐	☐	☐
Importer (in terms of %Purchases)	☐	☐	☐	☐

4. Indicate how many time ago the UK is a commercial partner of the company.

	< 1 year	> 2 years	3 years – 5 years	> 5 years
As Exporter	☐	☐	☐	☐
As Importer	☐	☐	☐	☐

B. The Brexit's Impacts

5. Indicate if the referendum result was a surprise for you.

☐ Yes
☐ No
☐ Do not know / Do not answer

6. Indicate if Brexit has caused any impact on your company.

	Very Negative	Moderately Negative	None	Moderately Positive	Very Positive
Exporter (in terms of %Sales)	☐	☐	☐	☐	☐
Importer (in terms of %Purchases)	☐	☐	☐	☐	☐

7. On the three months after the referendum, the pound suffered a strong depreciation. Indicate if this happening had any financial and/or managerial impact.

	Very Negative	Moderately Negative	None	Moderately Positive	Very Positive
As Exporter	☐	☐	☐	☐	☐
As Importer	☐	☐	☐	☐	☐

8. Indicate the degree of importance of the following topics on the negotiations between the UK and the European Union. (1 - No Importance / 5 - Very Important)

	1	2	3	4	5
Free Movement of Goods	☐	☐	☐	☐	☐
Minimal Bureaucracy	☐	☐	☐	☐	☐
Free Movement of Capital	☐	☐	☐	☐	☐
Rapid Implementation	☐	☐	☐	☐	☐
Free Movement of People	☐	☐	☐	☐	☐
Consistent Legislation	☐	☐	☐	☐	☐
Free Movement of Services	☐	☐	☐	☐	☐

9. If you consider that there is another aspect more relevant than the ones mentioned, please indicate it.

____

10. Order the (only) three topics that you consider as most important.

	1º	2º	3º
Free Movement of Goods	☐	☐	☐
Minimal Bureaucracy	☐	☐	☐
Free Movement of Capital	☐	☐	☐
Rapid Implementation	☐	☐	☐
Free Movement of People	☐	☐	☐
Consistent Legislation	☐	☐	☐
Free Movement of Services	☐	☐	☐
Other	☐	☐	☐

11. In case of having UK's suppliers, if Brexit leads to the imposition of trade barriers, indicate if you plan to look for new suppliers.

☐ Yes
☐ No
☐ Do not know / Do not answer

12. In case of being an exporter to the UK, if Brexit leads to the imposition of trade barriers, indicate the degree of probability of your clients look for new countries to buy.

	1	2	3	4	5	
Low Probability	☐	☐	☐	☐	☐	**High Probability**

13. Indicate your expectations about the impact of Brexit on the future of the commercial relationship between Portugal and the UK.

	Very Negative	Moderately Negative	None	Moderately Positive	Very Positive
Impact	☐	☐	☐	☐	☐

B. Results of Question 8: Classification of Aspects of Brexit' s Negotiations

Table A – Synthetization of managers' classification of the aspects of negotiations

	1	2	3	4	5	
	EXPORTERS (24 COMPANIES)					AVERAGE
FREE MOVEMENT OF GOODS			2	4	18	4,67
MIN. BUREAUCRACY			3	11	10	4,29
FREE MOVEMENT OF CAPITAL		1	7	7	9	4,00
RAPID IMPLEMENTATION		2	4	6	12	4,17
FREE MOVEMENT OF PEOPLE	1		1	6	16	4,50
CONSISTENT LEGISLATION			2	9	13	4,46
FREE MOVEMENT OF SERVICES		1	4	4	15	4,38
	IMPORTERS/IMPORTERS+EXPORTERS (15 COMPANIES)					
FREE MOVEMENT OF GOODS			1	3	11	4,67
MIN. BUREAUCRACY			1	4	10	4,60
FREE MOVEMENT OF CAPITAL			2	6	7	4,33
RAPID IMPLEMENTATION			2	4	9	4,47
FREE MOVEMENT OF PEOPLE				7	8	4,53
CONSISTENT LEGISLATION			1	6	8	4,47
FREE MOVEMENT OF SERVICES			1	6	8	4,47
	GLOBAL - COMPANIES WITH TRADE PARTNERSHIP (39 COMPANIES)					
FREE MOVEMENT OF GOODS	0	0	3	7	29	4,67
MIN. BUREAUCRACY	0	0	4	15	20	4,41
FREE MOVEMENT OF CAPITAL	0	1	9	13	16	4,13
RAPID IMPLEMENTATION	0	2	6	10	21	4,28
FREE MOVEMENT OF PEOPLE	1	0	1	13	24	4,51
CONSISTENT LEGISLATION	0	0	3	15	21	4,46
FREE MOVEMENT OF SERVICES	0	1	5	10	23	4,41
	COMPANIES WITHOUT COMMERCIAL RELATIONSHIP (48 COMPANIES)					
FREE MOVEMENT OF GOODS		2	5	14	27	4,12
MIN. BUREAUCRACY		5	7	15	21	3,84
FREE MOVEMENT OF CAPITAL		2	11	17	17	3,73
RAPID IMPLEMENTATION		2	12	15	18	3,73
FREE MOVEMENT OF PEOPLE		1	6	12	29	4,18
CONSISTENT LEGISLATION		3	10	15	20	3,84
FREE MOVEMENT OF SERVICES		2	5	18	23	4,04

C. SPSS Results

- <u>T-Test: Exporters vs. IIE</u>

Estatísticas de grupo

	globalwithout	N	Média	Desvio Padrão	Erro Padrão da Média
values	1,00	7	4,4103	,17073	,06453
	2,00	7	3,9244	,18547	,07010

Teste de amostras independentes

		Teste de Levene para igualdade de variâncias		teste-t para Igualdade de Médias						
									95% Intervalo de Co Diferenç	
		F	Sig.	t	gl	Sig. (bilateral)	Diferença média	Erro padrão da diferença	Inferior	Superior
values	Variâncias iguais assumidas	,729	,410	5,100	12	,000	,48589	,09528	,27829	,69348
	Variâncias iguais não assumidas			5,100	11,919	,000	,48589	,09528	,27813	,69364

Clique duas vezes
ativar

- <u>T-Test: Companies with trade vs. Companies without trade with the UK</u>

Estatísticas de grupo

	imporexport	N	Média	Desvio Padrão	Erro Padrão da Média
values	1,00	7	4,3512	,22160	,08376
	2,00	7	4,5048	,10789	,04078

Teste de amostras independentes

		Teste de Levene para igualdade de variâncias		teste-t para Igualdade de Médias						
									95% Intervalo de Confiança da Diferença	
		F	Sig.	t	gl	Sig. (bilateral)	Diferença média	Erro padrão da diferença	Inferior	Superior
values	Variâncias iguais assumidas	2,847	,117	-1,649	12	,125	-,15357	,09316	-,35654	,04940
	Variâncias iguais não assumidas			-1,649	8,693	,135	-,15357	,09316	-,36545	,05830